Internal Medicine

Med 300A

Syllabus
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Department of Internal Medicine
School of Medicine

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<td><strong>VAMC PALO ALTO</strong></td>
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Chairman’s Welcome

Welcome to the Department of Medicine and to your clerkship experience in Internal Medicine. You are fortunate to pursue your internal medicine education in one of the foremost departments in the nation. Our missions are to create educational programs that ignite a commitment to lifelong learning; to foster research programs that venerate scholarship without constraining its form; to balance general medicine with specialty medicine; and to shape the Profession of Medicine so that our values, behaviors and policies honor our duty to our patients and the broader society.

You are fortunate as well to experience your clinical education in a three hospital system that includes our University Hospital (Stanford Hospital and Clinics), a VA and a county hospital (Santa Clara Valley Medicine Center). Each hospital provides a distinctive emphasis in complexity of care, system of health care, and commitment to the underserved. Taken together, the clinical experiences at Stanford are unsurpassed at any academic medical center in the nation.

Over the next eight weeks, I hope you will keep your focus on the great privilege you have to learn medicine as members of medical teams that incorporate you fully into the care of our patients. Spend as much time as you can with your patients. And commit yourself fully to learning both the content as well as the craft of our profession.

I wish you all the best now and in the years ahead.

Sincerely,

Robert A. Harrington, MD
Arthur L. Bloomfield Professor of Medicine
Chair, Department of Medicine
I’m delighted to welcome you to your two-month block in internal medicine. Our goal is to ensure that your time with us leaves you with a sense for the excitement and variety that is inherent to internal medicine, and the satisfaction that comes from caring for patients with the sorts of problems that fall in our realm. No matter what field you decide to enter, a solid grounding in internal medicine will be important to your success.

In these pages we have assembled a variety of material, some of which are things you will need to know – schedules, dates, on-line cases, patient logs, NBME minimum passing scores (which happens to be a subject exam score of 60, roughly in the 20th percentile or above). I’ve also tried to include topics I wish someone had told me when I was in my clerkship! (How do I present? How do I write up my patients’ H &P? What exactly do I have to do to get an outstanding evaluation? How do I manage my time and keep sane?) I hope you will find this useful. The best advice I can give you at this stage is to carefully read and understand the course book, take to heart the tips and tricks in the back, be sure you understand what is expected of you and how you are evaluated.

We want you to finish your two months with us taking away much more than good clinical skills and sound knowledge. I hope, during this rotation, you will learn about Sir William Osler and other pioneering figures in medicine (including some who call or called Stanford home) and get to know their contributions. I hope this rotation will inspire you, and remind you of the reasons you came to medicine, remind you of your calling. I find I am still inspired by a seminal paragraph written by Tinsley Harrison in the preface to the first edition of Harrison’s Textbook of Internal Medicine published in 1950 (which is even before I was born!) The paragraph disappeared for a few editions, but it has now reappeared in the preface to newer editions and in reproducing it below, I have taken the liberty of changing the masculine pronoun to feminine. (Dr. Harrison was writing at a time when women in medicine were still a rarity.):

“No greater opportunity, responsibility or obligation can fall to the lot of a human being than to become a physician. In the care of the suffering, she needs technical skill, scientific knowledge, and human understanding. She who uses this with courage, with humility and with wisdom, will provide a unique service for her fellow beings, and will build an enduring edifice of character within herself. The physician should ask of her destiny no more than this; she should be content with no less.”

My fellow clerkship directors (Drs. Kugler, Ahluwalia, Knueppel, Chan) and I hope you will look back on the next two months as having helped you build the ‘enduring edifice of character.’

Sincerely,

Abraham Verghese MD, MACP, FRCP(Edin)
Linda R. Meier and Joan F. Lane Provostial Professor
Vice Chair for the Theory and Practice of Medicine
Clerkship Description

Med 300 teaches the natural history, pathophysiology, diagnosis, and treatment of medical illness. Emphasis is placed on acquiring the understanding, skills, and attitudes desirable in a scientific and compassionate physician. Students record histories, physical examinations, and laboratory data for patients for whom they are responsible and present their findings, together with their diagnoses and treatment plans, at rounds and conferences. Developing sound clinical reasoning skills is continuously emphasized. An essential aspect of the clerkship is the students’ gradual assumption of direct responsibility for, and full-time involvement in, patient care with the house staff and faculty team. To take advantage of the differences in patient populations and teaching staffs of the four hospitals, students spend four weeks at either SUMC or PAVAMC, and four weeks at either SCVMC in San Jose or KPMC in Santa Clara. The resulting eight week experience is an integrated curriculum designed to cover the essentials of internal medicine. The Department of Medicine supervises a random draw-based assignment to two of the four locations shortly before the beginning of each odd-numbered clerkship period. A passing grade will require both a satisfactory performance at both clinical sites and passing the NBME Subject Exam at the end of 8 weeks.
MEDICINE 300A CLERKSHIP OBJECTIVES

PATIENT CARE

- Perform an initial/admission H&P - with specific focus on elements pertinent to the patient's chief complaint.
- Perform a "chart biopsy".
- Perform a daily focused inpatient H&P
- Balance reliance on the medical record and interaction with the patient in gathering complete information.
- Given history and physical findings for an adult patient in the inpatient setting, formulate a differential diagnosis and a cost-effective and thorough diagnostic plan.
- Synthesize patient data to formulate an initial treatment plan.
- Analyze laboratory, EKG, and radiologic findings and incorporate results into assessments and plans
- Incorporate patients' cultural and personal values into plans for evaluation and treatment
- Plan for patient discharges while taking into account patients' home situations and medical needs
- Participate in requesting a consultation and identifying the specific questions to be addressed.
- Outline current indications for the following common procedures: angiography, CABG, angioplasty, intubation, thoracentesis
- Organize and prioritize responsibilities in the inpatient setting to provide care that is safe, effective and efficient

KNOWLEDGE FOR PRACTICE

- For each problem or diagnosis listed in the Medicine 300A core topics list, summarize essential clinical features and essential elements of diagnosis and management.
- Discuss the pathophysiology underlying each problem in the core topics list.
- Discuss risk factors, screening, and prevention strategies for each problem in the core topics list.

PRACTICE-BASED LEARNING AND IMPROVEMENT

- Identify and engage in learning activities to address gaps in one's knowledge, skills, or attitudes.
- Incorporate feedback into daily practice
- Incorporate information from reference resources and clinical studies in developing evaluation and treatment plans.
INTERPERSONAL AND COMMUNICATION SKILLS:

- Communicate diagnostic information and treatment plans to patients and families, adapting language to reflect patients’ medical fluency and cultural background.
- Present histories and physicals for new patients in through yet concise manner;
- Present focused histories and exams for established patients using SOAP format in less than 3 minutes on daily rounds;
- Compose detailed notes that effectively communicate patient assessments and treatment plans to all members of the care team.

PROFESSIONALISM

- Demonstrate compassion, integrity, and respect for others
- Demonstrate responsiveness to patient needs that supersedes self-interest
- Demonstrate respect for patient privacy and autonomy
- Demonstrate accountability to patients, society and the profession

SYSTEMS-BASED PRACTICE:

- Compare and contrast the features, practices, and values of different practice sites (e.g. county hospital, academic medical center, HMO, Veterans Administration)
- Participate in coordination of care within the broader health care system, including communication with consultants, referring physicians, PCPs, and outside agencies.

INTERPROFESSIONAL COLLABORATION

- Demonstrate an ability to work within the multidisciplinary team present on the medical wards

PERSONAL AND PROFESSIONAL DEVELOPMENT

- Use self-awareness of knowledge, skills and emotional limitations to engage in appropriate help-seeking behaviors
- Manage conflict between personal and professional responsibilities
MEDICINE 300A CORE TOPICS LIST

Cardiology
- Coronary artery disease
- arrhythmia
- valvular heart disease
- HTN
- pericarditis
- endocarditis
- heart failure

Gastroenterology
- GI bleed
- pancreatitis
- liver disease

Infectious disease
- AIDS
- tuberculosis
- sepsis
- FUO

Neurology
- altered mental status
- meningitis
- CVA

Nephrology
- proteinuria
- nephritis
- acute and chronic renal failure
- dysuria
- electrolyte disturbances
**Pulmonology**
- respiratory distress
- common respiratory diseases

**Endocrinology**
- thyroid function abnormalities
- hypercalcemia
- disorders of the adrenal gland
- diabetic ketoacidosis

**Rheumatology**
- monoarticular arthritis
- common connective tissue diseases

**Hematology**
- anemia
- coagulopathy
- leukemia
- dysprotenemia

**Oncology**
- cancer of colon, lung, breast
CORE CURRICULUM AND STUDY TOPICS

You will engage in two kinds of reading: one is reading related to your patients and their problems; the second is systematic reading to build your core knowledge.

To make sure that we have a core curriculum in internal medicine that all students will experience, no matter what pair of clinical sites they are assigned to, we have assembled for you a list of curriculum goals which we will aim to achieve by:

- **Small group discussions at each site focused on these topics.**

This is a coordinated effort involving the four hospitals through which you are rotating.

The curricular focus of Stanford and the VA Medical Center will be the same, and that of SCVMC and Kaiser will be the same. In this way, during your eight-week experience, you will cover the entire core curriculum.

We have highlighted selected topics which we strongly recommend you review well. These have been carefully chosen to represent what we consider to be "critical elements" in inpatient internal medicine.
Assignments

Med 300 – Assignments Due

- 2 Directly Observed H&P’s – paper forms
- 2 Multi-Source Feedback (one from non-md staff, one from peer) – paper or electronic
  URL: http://researchandevaluation.stanford.edu/prof
- 1 Patient Evaluation Form (from a patient of your choosing) – paper form
  (Spanish version on Canvas)
- Completed Patients Logs in MedHub

The above items are due to Nancy D'Amico (the clerkship coordinator), by the end of the clerkship. A suggestion is that you try to get the first 3 items on the list above done in the first 4-weeks of your rotation. Also, please check in with the Clerkship Coordinator to ensure everything is complete and no assignments are left outstanding.

EXTRA FORMS MAY BE FOUND ON CANVAS

Additional Information:
On-Call Schedule –
www.amion.com
Stanford Students Password = stanim
VA Students Password = pava
Valley Students Password = scvh
During the two months of Internal Medicine ward service, you are expected to complete the assigned readings. You should be prepared to discuss the weekly topics with your peers and faculty during small group sessions.

Please read about the topics listed below in a text book of your choosing.

**Kaiser/SCVMC**

Week 1 - Cardiology
Week 2 - Gastroenterology
Week 3 - Infectious Disease
Week 4 - Nephrology

**Stanford/VAMC**

Week 1 - Pulmonary
Week 2 - Endocrine/Metabolism and Women’s Health
Week 3 - Rheumatology
Week 4 - Hematology/Oncology
A. CARDIOLOGY GOALS

1. Coronary Artery Disease
   i. Recognize clinical histories consistent with coronary artery disease (stable/unstable angina, MI).
   ii. Recognize ECG findings of ischemia or infarct (anterior, inferior, lateral, posterior, non-Q).
   iii. Be familiar with medication to treat angina, including rationale for, mode of action, side effects, dosage (nitrates, beta blockers, calcium blockers, aspirin, heparin).
   iv. Be familiar with current indication for angiography, CABG, angioplasty.
   v. Be familiar with management of acute MI.
   vi. Be familiar with complications of acute MI and their management.

2. Arrhythmia
   i. Recognize patterns of first, second, and third degree heart block.
   ii. Be familiar with management options (atropine, temporary pacer) for heart block, as well as indications for permanent pacing.
   iii. Recognize PVCs, compared to other aberrant beats.
   iv. Recognize tachycardiac rhythms: Sinus tachycardia, supraventricular tachycardia, atrial fibrillation, atrial flutter, ventricular tachycardia.
   v. Be familiar with medications commonly used as antiarrhythmics (rationale for, mode of action, side effects and dosage).

3. Valvular Heart Disease
   - Recognize typical findings on physical exam:
     i. Mitral stenosis
     ii. Mitral regurgitation
     iii. Mitral valve prolapse
     iv. Aortic stenosis
     v. Aortic insufficiency
     vi. "Flow" murmur
4. **Hypertension**
   i. Recognize the clinical presentation of malignant hypertension (history and physical exam).
   ii. Be familiar with the clinical management of malignant or severe hypertension, including use of medications (rationale for, mode of action, side effects and dosage).

5. **Pericarditis**
   i. Recognize the clinical presentation of pericarditis, including typical symptoms and findings on physical exam and ECG.

6. **Endocarditis**
   i. Recognize the classic symptoms and signs of endocarditis
   ii. Know the variations of clinical presentation and causative organisms of endocarditis on native valves, prosthetic valves, and in IV drug users.
   iii. Understand the principles of drug and surgical therapy in this disease. Be able to outline a treatment course for the common organisms listed in #2.
   iv. Know the general indications for antimicrobial prophylaxis of endocarditis.

7. **Heart Failure**
   i. To understand the pathophysiology of right and left side congestive heart failure, including compensatory adaptations, the importance of afterload, preload, and contractability, and the difference between systolic and diastolic dysfunction.
   ii. To describe the common signs and symptoms of right and left side congestive heart failure.
   iii. To know the common causes of and precipitating factors in the development of heart failure.
   iv. To be familiar with the treatment of heart failure, with special attention to rationale for and mode of action, side effects and dosage of the common diuretics, afterload reducers, and digoxin.

**B. GASTROENTEROLOGY GOALS**

1. **GI Bleed**
   i. Know the common causes of upper GI bleed and lower GI bleed and treatments.
   ii. Be able to develop management strategy for various presentations of GI bleed (initial assessment, stabilization, diagnostic work-up).
2. Pancreatitis
   i. Know the clinical presentation of acute pancreatitis, including predisposing history (causes), range of symptoms, signs and lab data.
   ii. Know how to assess the severity of the attack. Be familiar with the complications of pancreatitis.
   iii. Be able to develop management strategy for various presentations of acute pancreatitis (initial assessment, stabilization, diagnostic work-up).

3. Liver Disease
   i. Be able to compare various types of viral hepatitis (A, B, C, delta agent) in terms of transmission route, incubation, clinical presentation, diagnostic tests, potential to progress to become chronic, complications.
   ii. Know what prophylactic measures are available to prevent viral hepatitis.
   iii. Know the clinical presentation of alcoholic hepatitis, alcoholic cirrhosis, including typical history, symptoms, exam and lab findings.
   iv. Be familiar with major sequelae of cirrhosis, including portal hypertension with gastroesophageal varices, splenomegaly, hypersplenism, ascites, encephalopathy, spontaneous bacterial peritonitis, and hepatorenal syndrome.
   v. Know how to interpret LFTs in a variety of clinical situations (viral and alcoholic hepatitis, toxic ingestion, biliary obstruction, alcoholic cirrhosis, primary biliary cirrhosis, liver carcinoma, fatty liver, Gilbert's).

D. INFECTIOUS DISEASES GOALS

1. AIDS
   i. To know what criteria establish the diagnosis of AIDS.
   ii. To define the risk factors for HIV disease.
   iii. To understand when retroviral therapy should be started.
   iv. To understand when PCP prophylaxis should be started.
   v. To know what the common neoplasms are seen in HIV disease.
   vi. To be familiar with infections HIV-infected individuals are more likely to get than normal hosts: Bacterial, viral, fungal, protozoal, and mycobacterial.

2. Tuberculosis
   i. To know the difference between tuberculosis and tuberculosis infection.
   ii. To understand what groups of individuals are at highest risk for TB.
   iii. To know how the diagnosis of TB is established.
iv. To understand when respiratory isolation is indicated.

v. To be familiar with indications for treatment.

vi. To be familiar with the common side effects of the major TB drugs.

vii. To know what groups of individuals are most likely to have drug resistant organisms.

3. Antibiotics

   i. To understand the rationale for choice of initial antibiotic therapy.

   ii. To know the various classes of antimicrobial agents and indications for each:

      a. Betalactams

      b. Cephalosporins

      c. Aminoglycosides

      d. Sulfa drugs

      e. Quinolones

      f. Antiviral agents

      g. Antifungal agents

   iii. To understand the use of MICs and MLCs.

4. Sepsis

   i. To define sepsis and septic shock.

   ii. To know the immediate work-up and treatment of the septic patient.

   iii. To be familiar with multisystem failure seen in the patient with septic shock.

5. The Immunocompromised Host

   i. To define neutropenia.

   ii. To understand the work-up of the febrile, neutropenic patient.

   iii. To know the principles of initial antibiotic selection in the febrile, neutropenic patient.

   iv. To understand the nadir of myelosuppression which occurs as a result of antineoplastic therapy.

   v. To recognize the signs and symptoms of catheter infection.

6. Fever of Undetermined Origin

   i. To define FUO.

   ii. To know the five major diagnostic categories into which patients with FUO fall.
D. NEUROMUSCULAR GOALS

1. Altered Mental Status (delirium/coma/overdose)
   i. To understand the difference between delirium and dementia.
   ii. To know the immediate work-up of the patient with altered mental status.
   iii. To be familiar with the various causes of altered mental status: metabolic, infectious, drugs, withdrawal, bleed.
   iv. To understand the difference between lethargy, obtundation, stupor, coma, and brain death.
   v. To demonstrate the Glasgow Coma Scale.
   vi. To be familiar with the treatment of the comatose patient including both immediate and ongoing care.

2. Meningitis
   i. To be familiar with the signs and symptoms of meningitis.
   ii. To differentiate between acute and chronic meningitis.
   iii. To know the most common organisms in adult bacterial meningitis and what is the initial work-up and treatment.
   iv. To recognize the difference in values for glucose, protein, cell count, and Gram's stain between bacterial and viral meningitis.

3. CVA
   i. To understand the principle types of stroke (thrombotic, embolic, hemorrhagic) and the work-up and management of each.
   ii. To understand the difference between CVA, RIND, and TIA.

E. RENAL AND ELECTROLYTE DISORDERS GOALS

1. To know differentials and management of proteinuria and nephrotic syndrome.
2. To know the work up of acute renal failure.
3. To know diagnosis of nephritic syndrome.
4. To know management of chronic renal failure.
5. To know workup of dysuria.
6. To know management of disorders of water balance.
7. To know work up and management of sodium balance disorder.
8. To know differential and management of potassium balance.
9. To know how to manage disorders of acid-base balance.

F. MISCELLANEOUS GOALS

1. Pain
   i. Develop a working knowledge of various medications used to treat pain, including rationale for their use, mode of action, side effects and dosage.
   ii. Develop management strategies for treating acute severe pain, chronic pain, neuropathic pain,
   iii. Pain in terminal illness.

2. Clinical Ethics
   i. Understand issues regarding patient preferences and autonomy
   ii. Understand how to determine patient competence and capacity to choose.
   iii. Understand principles of informed consent.
   iv. Understand how to handle refusal of treatment by patients with capacity to choose.
   v. Understand how to make decisions to terminate or withhold intervention:
      a. Medically futile situations.
      b. Quality of Life determinations.
      c. Living will/surrogate decision maker
      d. DNR orders

3. Care of Dying Patients
   i. Learn ways to improve communications when sharing the diagnosis of terminal illness with patients and their families. Include how to:
      a. "Break the news"
      b. Anticipate range of reactions
      c. Maintain hope in realistic context
ii. Understand need to readjust goals of therapy when treatment ceases to extend living and serves to prolong dying. Includes:

- Pain control
- Strategies to support nutrition
- Attention to bowel and bladder function
- Prevention of bedsores
- Treatment of depression
- Avoid touch deprivation
- Address fear of abandonment.

**NOTE: THIS SERIES OF GOALS CONTINUES IN THE NEXT ONE-MONTH BLOCK**
G. PULMONARY DISEASES GOALS

1. To be able to formulate a working differential diagnosis for a patient presenting with respiratory distress.

2. To know the diagnostic and therapeutic modalities available for patients with various respiratory processes.

3. To know the relative indications for intubation.

4. To be able to systematically evaluate arterial blood gases and then interpret them in light of the clinical setting.

5. To be able to interpret chest x-rays and to know which radiologic features can be seen in each of the respiratory diseases.

6. To know when a thoracentesis is indicated and how to interpret the results.

7. To know how to perform and read a sputum gram stain.

H. ENDOCRINE-METABOLISM GOALS

1. To elicit the proper history and perform the relevant physical examination on a patient suspected of having both hyper- and hypothyroidism.

2. To be able to interpret (in the context of the clinical setting) the results of the commonly ordered thyroid function tests, especially free T4, T3 RU, TSH, anti-TG and anti-M antibodies, and RAI scan and uptake.

3. To be able to discuss the treatment options of a patient with hyperthyroidism.

4. To know how to treat a patient with hypothyroidism including how to monitor replacement therapy.

5. To be able to elicit the proper history and perform the relevant physical examination on a patient with hypercalcemia.

6. To know the common causes of hypercalcemia and the laboratory investigation of each.

7. To be able to treat acute severe hypercalcemia depending on its etiology.

8. To elicit the proper history and perform the relevant physical examination on a patient suspected of having hyper- and hypocorticalism and hyperaldosteronism.

9. To be able to orchestrate the evaluation and interpret the test results of a patient with the above disorders of the adrenal gland.

10. To know the acute management of adrenal insufficiency.

11. To understand the pathophysiology, treatment, and complications of diabetic ketoacidosis and non-
ketotic hyperglycemic hyperosmolarity.

**J. RHEUMATOLOGY GOALS**

1. Approach to the patient with monoarticular arthritis.
2. Have a working knowledge of the common connective tissue diseases, especially modes of presentation, common complications and usual therapies.
3. Predict and interpret synovial fluid findings for the common arthritides.
4. Predict, interpret, and know the limitations of the various serologic tests for the common rheumatologic disorders.

**K. HEME-ONC GOALS**

1. Anemia Goals
   i. To know the differential diagnosis of the common anemias classified by red blood cell size and reticulocyte count.
   ii. To know the relevant history and physical findings in the investigation of a patient with anemia.

2. Coagulopathies Goals
   i. To have a working knowledge of the coagulation cascade, including which factors are measured by the commonly ordered clotting tests (PT, PTT, P&P, thrombin time, and bleeding time).
   ii. To know how certain disease processes and treatments affect these clotting tests (especially liver disease, DIC, warfarin, heparin, and NSAIDS).
   iii. To know what historical information to elicit and physical findings to look for in a patient with a suspected bleeding diathesis or hypercoagulable state.
   iv. To know the differential diagnosis of platelet-related bleeding and thrombocytopenia.

3. Leukemia Goals
   i. To differentiate acute from chronic leukemia and lymphocytic from nonlymphocytic leukemia.
   ii. To identify the presenting symptoms, complications, and prognosis of the different leukemia’s.
Dysproteinemia Goals

i. To know the differential diagnosis of a monoclonal gammopathy and the significance of this finding.

ii. To know the complications of multiple myeloma.

5. Cancer of Colon, Lung And Breast Goals

i. To know the risk factors for these common malignancies and potential presenting symptoms.

ii. To know the potential complications of these malignancies.

iii. To gain a basic understanding of staging and treatment.
We are hoping that you will see patients with all of the conditions below over the two months of medicine clerkship. Keep in mind that your patient can have more than one condition.

Please use the patient log from MedHub to keep track of the patients you see. Ideally, you should see actual patients with all of the conditions listed on the checklist. You are required to complete the log by the end of the eight-week rotation – the log will NOT be available to you after your last Friday of the 8 week rotation. If you have not seen patients with the conditions below, you are required to complete the SIMPLE ONLINE case and then log that case into MedHub.

Following is a list of acute and chronic conditions you should observe:

**ACUTE:**

1. Chest pain
2. Dyspnea
3. Electrolyte disorder
4. GI bleed
5. Mental status change
6. Renal disorder
7. Sepsis
8. Thrombotic disease

**CHRONIC:**

1. Chronic disability
2. Coronary artery disease
3. Congestive heart failure
4. Failure to thrive
5. Hypertension
6. Lung disease
7. Rheumatologic Disease
<table>
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<th>Logged E*Value</th>
<th>Patient Encounter Type or Specific Skill</th>
<th># of patients to be seen</th>
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<td>Sepsis</td>
<td>1</td>
<td>DPC</td>
<td>In-Pt</td>
<td>Case #29</td>
</tr>
<tr>
<td>Acute</td>
<td>☐</td>
<td>Thrombotic Disease</td>
<td>1</td>
<td>DPC</td>
<td>In-Pt</td>
<td>Case #28</td>
</tr>
<tr>
<td>Chronic</td>
<td>☐</td>
<td>Chronic Disability</td>
<td>1</td>
<td>DPC</td>
<td>In-Pt</td>
<td>Case #8</td>
</tr>
<tr>
<td>Chronic</td>
<td>☐</td>
<td>Coronary Artery Disease</td>
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<td>DPC</td>
<td>In-Pt</td>
<td>Case #1</td>
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<tr>
<td>Chronic</td>
<td>☐</td>
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<tr>
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<tr>
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<td>Rheumatologic Disease</td>
<td>1</td>
<td>DPC</td>
<td>In-Pt</td>
<td>Case #32</td>
</tr>
</tbody>
</table>

* OB = observation or case discussion; Direct patient care = participation in History-taking, Physical exam, and/or Clinical Decision-Making (formulation of assessment and plan, presentation, notes, practical management of patient care).

+ O – outpatient; I – inpatient
**SIMPLE On-Line Cases Instructions**

http://www.med-u.org/

The link above will take you to the MedU website, where SIMPLE lives.

If you have not already registered (students who have done pediatrics, surgery, and/or family medicine are likely already registered), you should use the link in the upper right hand corner to register under Institutional Subscription. You will need to use your stanford.edu email addresses to be registered in the system.

From there, you can get to the cases by going to the Virtual Patient Cases link or Login to Cases (also upper right). You should select SIMPLE, and a case list should appear.

Please let Nancy D'Amico (650) 721-1640 or ndamico@stanford.edu know if you have any questions, or if these instructions do not work for you.
HOURS YOU CAN EXPECT TO SPEND IN THE HOSPITAL
AND THE GENERAL ENVIRONMENT

Our efforts to provide you with a sound academic and clinical education are carefully planned and balanced with concerns for patient safety and as well as your well-being as a student. Following are some general guidelines about supervision of students, duty hours and on-call activity:

SUPERVISION OF STUDENTS

- All patient care must be supervised by qualified residents or faculty.
- Faculty, residents and students must be educated to recognize the signs of fatigue and adopt and apply policies to prevent and counteract the potential negative effects.

DUTY HOURS

Duty hours are defined as all clinical and academic activities related to the students:

- Patient care (both inpatient and outpatient)
- Administrative duties related to patient care
- Provision for transfer of patient care
- Time spent in-house during call activities
- Scheduled academic activities, such as conferences.

NOTE: Duty hours do not include reading and preparation time spent away from the duty site.

- Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.
- Students must be provided with one day in seven free from all educational, clinical and administrative responsibilities, averaged over a four-week period, inclusive of call. One day is defined as one continuous 24-hour period.
Site Specific Information

Stanford University Hospital

TEACHING SESSIONS: always check your calendar the night before

MORNING REPORT:
- 9am to 10am Tuesday and Thursday, student report check schedule for location
- 9am to 10am Monday and Friday: resident report Lane 154

Grand Rounds: 8am Wednesday LKSC Berg Hall
Noon Conference: 12:30 Weekdays Lane 154
Chief’s review: Monday 1-2 Lane 154
Bedside Rounds: Wednesdays 1:30 meet at the top of the escalators; near Bing Dining Room.

Evaluations: all members of your team are asked to provide evaluation feedback on your performance. You will be given materials to provide them with a way to do written feedback.

Schedule: your resident is responsible for making the team’s days off schedule for the month. It is YOUR responsibility to remind them that you may only have weekend days off as we do not want you to miss out on teaching sessions.

Team Work Rooms:
- A: On unit B3, code 4431
- B: On unit B3 code 4431
- C: On unit B3 code 4431
- D: On unit C3 code 4431
- E: On unit B1 code 12345

Patient Units:
- B1, C3: non-monitored medicine floors
- B3, B2: IICU or monitored medicine floors
- CDU: clinical decision unit: located on unit C1, extended stay ER from which many patients are admitted to medicine if they are too sick to go home.
- ED Holding area: across from the escalators on the first floor

Food: Cafeteria first floor open 7-7
- Coffee cart near ED entrance of cafeteria open 7-midnight weekdays, 7-7:30 weekends

Paging: use smartpage.stanford.edu on any hospital computer
- Call the operator by dialing 288 from any hospital phone or 650-723-6661

Documentation:
- No cutting and pasting except in the instances of medications (with patient verification) and diagnostic studies. Templates are permissible.
- Notes:
  - ALL H&Ps MUST BE COMPLETED BEFORE COMPLETION OF WORK ON THE ON-CALL NIGHT.
  - A daily electronic progress note is required for all patients.
- Every daily student note needs to be co-signed, ask your attending if they want to cosign or have the resident do it.
VA PALO ALTO HEALTH CARE SYSTEM

This is a clinical rotation where your primary learning opportunities arise from direct patient interaction and participation in formulation of assessments and plan – you should actively seek out such experiences throughout the month.

TEACHING SESSIONS

Fridays 1:30pm (see period specific calendar for updates)
B2-100 Conference Room
Teaching sessions include:
• Bedside rounds Mon/Friday
• Infectious Disease lectures
• Weekly sessions with Chief Residents

EVALUATIONS

• You are to initiate a brief feedback session mid-rotation with your resident/attending.
• At the end of your four weeks at the VA, a grading session will be held with your team and a debriefing session with you and Dr. Ahluwalia will follow (usually between 1 p.m. and 2 p.m. on the last Friday of the rotation, in lieu of the teaching session.

INDIVIDUAL ASSIGNMENTS

• Review the expectations, reading assignments, and core curriculum outlined by Dr. John Kugler.

SCHEDULE

• Your days off (never to include a weekday) should be arranged with your resident and attending.
• If this is your second month of the medicine clerkship, you will be excused from your clinical duties on the final Friday of the month in order to take the shelf exam and attend your feedback session.
• Please note that all of the above is mandatory for successful completion of the rotation. Dr. Ahluwalia, team resident and team attending must be consulted regarding any conflict or absence.
• Students should check the mandatory conference/bedside rounds schedule for each day following call.
• Students should eat or set aside lunch plate prior to start of 12:30pm Bedside rounds, and may eat during any 12:30pm sit-down teaching sessions

Team Work Rooms - (Combo 4+2, 3, “Enter”)

• Team A: A2-135 (2A)
• Team B: A2-110 (2A)
• Team C: F2202
• Team D: A2-114 (2A)
• Team E: F3-242
VA PALO ALTO HEALTH CARE SYSTEM – Cont’d

Patient Units

- General Medicine Floors: 2A, 3C (overflow)
- Telemetry: 2A, 3C (8 beds each floor, for hr/rhythm monitoring, low risk r/o MI)
- IICU: 2F (higher level nursing care, post-cath, high risk r/o MI, q2 nebs, low dose pressors, etc.)
- EDOU: 1F (23 hr unit with monitored beds right next to the ED, for low risk r/o MI patients and other short stays)
- MSICU: 3F (closed Unit with separate ICU team.)

Food

- Canteen on the 1st floor, Building 101, hours: Mon-Fri 7:00am-3:30pm, Sat/Sun closed
- Java City Café on the 1st floor, Building 101, hours: Mon-Fri 6:30am-8:00pm. Sat/Sun 9:00am-4:00pm
- On-call dinner and post-call breakfast trays can be requested by calling food services (x64819) or going to the food service department in the basement.

Morning Report/Conferences

- Mondays 10am - Morning report
- Tuesdays: 10am - Morning report
- Wednesdays 8am Grand rounds
- Thursdays: 10am - Morning Report
- Fridays: 10am - Morning Report

Noon Conferences

- Daily in the Medicine Conference Room. Wednesdays are Multi-Disciplinary conferences down the hall in the library conference room.

Paging

- To page: dial x65970, then the pager ID (or 9-723-8222)
- Make sure your pager is forwarded to the appropriate person when you are not in-house (cross-cover intern or your resident), and un-forward the pager when you are in the hospital.
VA PALO ALTO HEALTH CARE SYSTEM – Cont’d

Documentation

- As per VA policy **no cutting and pasting will be allowed** except in the instances of medications (with patient verification) and diagnostic studies. Templates are permissible.

- Notes:
  - H&Ps and daily notes must be typed.
  - **ALL H&Ps MUST BE COMPLETED BEFORE COMPLETION OF WORK ON THE ON-CALL NIGHT.**
  - A daily electronic progress note is required for all patients.
  - Do follow the template when it asks you to insert the name of your attending.

- Procedures: Procedure note documenting that consent was obtained and describing the procedure and any complications. A separate consent form should be signed by the patient (including transfusions).
- Every daily student note needs to be co-signed with a brief addendum. An addendum focusing on the assessment and plan needs to be written for all H&Ps.
- Students are not permitted to compose discharge summaries

Labs/EKGs (non-IICU floors)

- Labs are drawn by the phlebotomy staff at 6AM and 4PM only M-F, 7AM only on weekends.
- Labs needed at other times (including blood cultures) are drawn by the Intern/Student (can send ambulatory pt down to lab during working hours). The exception is cardiac panels on telemetry, and PTT’s on patients on heparin drips, drawn by the RN. In the IICU the nurses will draw all labs, at any time (make sure to enter “ward collect”, not “lab collect”).
- If daily labs are needed, make sure to order these specifically on admission (default is 1 time). You can order up to 3 days' worth of labs at a time, so please develop the habit of double-checking that am labs are ordered before leaving the hospital.
- Old EKGs are available on Vista imaging; talk with your resident for specifics.
- EKGs: **Routine AM** available by EKG technician on weekdays (if ordered in time), other times by the Intern.
- **STAT EKGs** (chest pain, etc.) are done by RNs.

Radiology

- Radiology residents/attendings are available to reviews films with team; if you need to review a film urgently please page the resident on call.
- MRI, CT, and US are located in the DRC (on the way to Building 7, past the ER).
- View films on line using ‘Stentor’ icon on the desktop. The user name and password should be the same as your network log on. Please contact Mary Montufar for assistance.
- Can listen to dictated reports by calling 6-0515, then enter 4 (for PAVA), then 11111 for password, then pt SSN
VA PALO ALTO HEALTH CARE SYSTEM – Cont’d

Supplies

- Supplies are in the Omni-Cell on each ward
- Phlebotomy supplies are in the room behind each nursing station.

Hospice Unit (4A)

- Palliative Care Consult – any patient with palliative care or pain control issues (during regular working hours)
- Hospice Unit – a patient may be transferred 4A for interdisciplinary palliative/hospice care under the hospice service.

Autopsy

- You are encouraged to attend Autopsy Conferences on your patients (1:15pm on Thursdays, 4th Floor Building 100).

Library

- 2nd floor, Building 101 (9AM-4PM). You can sign out a key from Security (1st floor, Building 101, any hour)
- A smaller library of textbooks is located in the Chief Resident’s office.

Employee Fitness Center

- 24 Hour Workout Facility – Basement of Bldg 100, code: 2-5-4-3

Parking/Transportation

- Avoid “Visitor”, “Car Pool”, “Four-hour”, and other restricted sections. Tickets for driving above the very low speed limit are not unusual
- Shuttle to/from Stanford every 30 minutes 7:30am-5:30pm on weekdays leaves from front of VA hospital
- Please allow extra time if your vehicle registration month requires off-site parking.

Discharge Coordinator:

- Maureen Lawrence x69238, pager 11501, 8a-4:30p weekdays
VA Chief Residents:

- Office is located in the Department of Medicine office suite, 2nd floor of building 101, behind the noon conference room.
- One of the three inpatient chiefs is “on call” 24/7/365 for after-hours issues.
- Office numbers are **x6811** and **x64192**

Linda Geng 12815
lindage@stanford.edu

Kai Swenson 12843
kswenson@stanford.edu

Samantha (Xiao-Yan) Wang 12847
wangxy@stanford.edu
Evaluation system for Med 300

Med 300 uses the RIME format evaluations. For Mid-Rotation Feedback evaluations are collected (from the student’s teams during their first 4 week block) and we run a report in MedHub and this is the data we use for the students Mid-Rotation Feedback sessions. All sites Stanford, PAVA, SCVMC & Kaiser Santa Clara use this same system and the Site Director at each site meets with the students individually to discuss their performance mid-way through their medicine rotation.

At the end of the medicine rotation evaluations are solicited from the teams the students worked with during their 2nd 4 week block and we run a report in MedHub and this is the data we use for the end of medicine evaluation sessions with the Site Directors.

Determining Grades in Med 300

After we have solicited and received enough evaluations for each student, the clerkship coordinator creates a spreadsheet to send to the evaluation committee. The evaluation committee consists of the Site Directors at each site, Dr. John Kugler, Stanford; Dr. Arlina Ahluwalia, PAVA; Dr. Stephanie Chan, SVCMC; Dr. Ryan Knueppel, Kaiser Santa Clara. The site directors meet on a conference call to discuss “meets” or “exceeds” in both domains of Patient Care and Professionalism. Only after those grades are determined do we receive the shelf exam scores for the students.

Only after grades are determined and we receive the shelf exam score is the summative section in their final evaluation written and the final evaluation is submitted.
Your written evaluation is the result of a combination of direct observations, multiple choice examinations, and/or standardized patient examinations. It's the responsibility of your clerkship director to provide a written evaluation of your performance based on data provided by faculty, housestaff, and others who have observed your work closely.

Written evaluations of clerkship performance are completed no later than six weeks after the end of the clerkship. If you have questions or concerns about written evaluations, you should contact the Clerkship Director, Dr. John Kugler, or an Advising Dean, to request a review.

If your concerns remain unresolved, you or your Advising Dean may request a review by the Committee on Professionalism, Performance, and Promotion.

Do read the ‘Tips and Tricks’ section later in this course book for tips on what constitutes a great performance and pitfalls to avoid.

NOTE: You are allowed two days of excused absences on 4-6 week rotations and three days of excused absences on eight-week rotations. Absences extending beyond these limits require additional make-up time.
Pass with distinction is based on demonstrated excellence in three domains

Patient Care
Two Directly observed H&Ps completed
Clinical evaluations based on RIME framework: Evaluations will mainly come from your preceptors.

- Qualities of a “reporter” include
  - Gathers and presents information that is sufficiently complete and accurate to allow the preceptor to manage care
  - Presents data clearly and logically, following a standard format (CC, HPI, PMHx, FHx, SHx, exam…)
  - Summarizes data succinctly with the key features from each element of the history and exam

- Qualities of an “interpreter” include
  - Adapts data-gathering (history and exam) and reporting to the situation/reason for visit or hospitalization
  - Accurately interprets findings on history and exam
  - Consistently considers/offers an appropriately prioritized and limited number of reasonable options in the DDx and provides an appropriate rationale for each.
  - Selectively presents pertinent information; arranges data from history, exam, and diagnostic evaluation in a manner that reflects appropriate prioritization of the DDx and/or problem list.

- Qualities of a “manager” include:
  - Offers a reasonable plan for testing and/or treatment; presentations include ideas for immediate next steps and longer term planning, including needs beyond the immediate hospitalization or clinic visit
  - Incorporates patients’ values and preferences in treatment planning
  - Takes primary responsibility for task management and follow-up (e.g. calling consults, arranging discharges; following up outpatient lab results, phone calls to patients)
  - Incorporates information from reference resources and clinical studies in developing evaluation and treatment plans.

Knowledge: Medicine Shelf Exam Score – raw score of 83 or above

Professionalism: Multisource evaluations are solicited from non-md staff and patients

http://researchandevaluation.stanford.edu/prof

Evaluations must show both:

- No concerns in the following areas:
  - Relationships with Patients and Families
  - Relationships with Students, Faculty, Staff
  - Duty, Accountability, Reliability, Responsibility
  - Commitment to Excellence: Self Improvement and Adaptability
  - Honesty, Integrity, Adherence to ethical practice principles

- Evidence of exceptional professionalism, with some examples including:
  - Extends self beyond usual duties to ensure patients’ comfort or well-being
  - Advocates on behalf of patients
  - Without prompting, takes on extra work to help the team
  - Maintains composure in difficult situations
  - Manages conflict in a collegial manner
  - Patients, families or non-MD staff offer unsolicited praise
### Summary of Criteria for Pass, Pass with Distinction: Internal Medicine 300A

<table>
<thead>
<tr>
<th>Category</th>
<th>PASS</th>
<th>PASS WITH DISTINCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Care</strong></td>
<td>Functioning at the Interpreter level</td>
<td>Functioning at the Manager level</td>
</tr>
<tr>
<td>(Evaluation data submitted by residents and faculty)</td>
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</tr>
<tr>
<td><strong>Professionalism and Interpersonal Communication</strong></td>
<td>No significant or consistent concerns</td>
<td>No significant or consistent concerns AND consistent evidence of exceptional professionalism</td>
</tr>
<tr>
<td>(Evaluation data submitted by residents and faculty)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Direct observation of clinical skills</strong></td>
<td>2 Structured Encounter forms submitted</td>
<td>2 Structured Encounter forms submitted</td>
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<tr>
<td>(Observation and feedback arranged by student; forms submitted by student to clerkship coordinator)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Multisource Feedback</strong></td>
<td>---</td>
<td>Multisource feedback solicited from</td>
</tr>
<tr>
<td>from non-MD staff, peers</td>
<td></td>
<td>o 1 non-MD staff member</td>
</tr>
<tr>
<td>(Feedback requested by student link. <a href="http://med.stanford.edu/professionalism">med.stanford.edu/professionalism</a> Student to provide names of evaluators to clerkship coordinator.)</td>
<td></td>
<td>o 1 peer</td>
</tr>
<tr>
<td><strong>Multisource Feedback from patient(s)</strong></td>
<td>---</td>
<td>Multisource feedback solicited from</td>
</tr>
<tr>
<td>(Student to arrange for feedback using paper Patient Feedback form. Completed form to be returned to coordinator by student, faculty member or resident - or faxed directly by patient)</td>
<td></td>
<td>o 1 Patient</td>
</tr>
<tr>
<td><strong>Medicine Shelf Exam Score</strong></td>
<td>Raw score of 60 or above</td>
<td>Raw score of 83 or above</td>
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<tr>
<td>(NBME Subject Exam)</td>
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<tr>
<td><strong>Assignments</strong></td>
<td>Patient logs completed</td>
<td>Patient logs completed</td>
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TIPS AND TRICKS
OUTSTANDING PERFORMANCE IN THE INTERNAL MEDICINE CLERKSHIP

While we have discussed what is expected of you, and outlined reasons for possible failure in the clerkship, we also want to point out what would give you a record of outstanding performance.

FUND OF KNOWLEDGE
1. You would have outstanding knowledge in most areas and would have read beyond the student general medicine text.
2. You can tie in your basic science knowledge easily and practically with your clinical knowledge.
3. You have no problem honing in on what you don’t know and finding out more, and digging deep.

CLINICAL SKILLS
1. Your history-taking is smooth, thoughtful and thorough and you assimilate and organize it well. You make use of silence, of summation and you pick up on the patient’s physiologic state during the interview.
2. You understand the tremendous value of old records, old charts, old x-rays, and by attending rounds, you have found information that expedites management decisions for your patient.
3. You actually carry and use the ophthalmoscope you bought in your first year, and your physicals are thorough and unlikely to miss the big things.
4. You do a sound neuron exam and no one has to ask you if you did a rectal or a breast exam (but always with a resident or attending).
5. You know how to give long clear presentations without notes, but when the situation calls for it, you can summarize the H&P in three minutes.
6. You get along well with the team and they wonder how they will manage when you leave.

INFORMATION PRESENTATION
1. Your H&Ps are telling a clear story and anticipate the differential by considering all the pertinent positives and negatives. Everything pertinent to the HPI is in there (including things such as a CABG one year ago in a person with chest pain) and not hidden in the PH, or SH.
2. Your physical examination clearly shows you have a method and are thorough.
3. You have constructed an appropriate differential diagnosis, one that shows you have read, thought about and even gone back to the patient to clarify issues that were not clear.
4. You know how to prioritize your differential so that you consider the most dangerous and reversible conditions first, then the common conditions before coming up with exotic diagnoses.
5. Your oral presentation, even when your patient has few findings, manages to convey your good training.
6. You don’t use notes to present, particularly if you have had any warning that you will be asked to present.
**PROFESSIONAL JUDGMENT AND DEVELOPMENT:**

1. You are eager, on time, dressed as you would want your doctor to be dressed, and well groomed.

2. You are ready to take on assignments, and see care of your team and being a team player as more important than disappearing to study.

3. You are happy to get involved with other patients on your team rather than saying, "It's not my patient."

4. You are interested in the noon conferences, and morning reports and you are attentive, and not tuning out or checking your palm device.

5. You participate in conferences, rounds and call activities.

6. You are the first to know your patients labs and test results, and you have them in your head for the most part, but accurately recorded somewhere.

7. You are on top of your patients’ meds and doses and side-effects.

8. You never pass on an opportunity to learn, no matter what the situation.

9. You handle all the differing and sometimes difficult personalities in medicine with ease.

10. You ask for feedback and you respond by doing better.

**INTERPERSONAL SKILLS**

1. Most of your patients think of you as their doctor, even though they know you are a med student.

2. The family has come to bond with you.

3. When there is a problem or conflict, you know how to resolve it or to bring it to the attention of others who can help.

4. You understand and respect the team hierarchy and you don’t engage in one-upmanship.

   Your resident trusts you to be able to soothe and talk to a “difficult” patient without help.
WHAT’S INVOLVED IN GETTING EXCELLENT EVALUATIONS?

Below are some comments taken from past real evaluations that are examples of excellent to outstanding performance in your clerkship:

- Supervisors are impressed by her ability to focus and adapt her questions according to an evolving differential diagnosis. "She forms a differential in her head as the history progresses and adjusts her questions as she goes."

- "In a patient with pain who resisted examination, xxx devised creative ways to engage him, make him comfortable."

- "Did an excellent job eliciting subtle physical findings in a stoic patient. I was particularly impressed that she found a condition that no one else had observed."

- Does not have any inhibition when it comes to proposing her own plan before it has been discussed by the group.

- Able to give an outstanding one-liner—to quickly convey what was happening with patients. Knows what’s important to emphasize during sign-out.

- Able to synthesize clinical information very effectively. Impresses evaluators by thinking beyond an immediate treatment plan to consider the practical and social implications of clinical decisions.

- Functions as a sub-intern or intern. Supervisors feel comfortable allowing xxx to work independently: seeing patients, communicating with consultants, coordinating care.

- "He had a particularly strong understanding of the patho-physiology underlying his patients' problems and included this as part of his decision-making."

- Sets the standard for learning for both medical students and housestaff. "He constantly read about his own patients as well as other patients to further his own learning."

- On more than one occasion, offered important suggestions to help the team manage their patients (e.g., considering Zosyn as a potential cause of a rising serum creatinine level.)

- "On a busy day during the inpatient rotation, xxx took responsibility for providing an outstanding teaching session when residents and faculty were too busy to do so."

- Integrates new knowledge in front of your eye: information learned one minute applied the next minute then retained and applied to new cases many days later.

- "What’s most impressive is that he is continually eager to 'consume' more information and use this information to better understand and care for his patients."

- "Was able to engage a very reluctant, nervous patient. Drew her out so that by the end of the visit she was very comfortable and engaged."

- "Assigned to see angry families and handled both with grace, maturity, patience, and tact; managed to calm patient’ families and called them by name."

- Connects with patients on a very personal level and is an advocate for them. Speaks up for patients any time she suspects that care is sub-par."
• "Patient's family wrote a detailed thank-you note, describing xxx as 'unique and special in [his] patience, understanding, and care ..."

• Takes notes at sign-out for ALL patients -follows everything on every patient. Actively participates in the care of every patient, not just hers.

• Always checks to see if anything else needs to be done before leaving post-call or at the end of the day.

• Definitely sees patients as his responsibility. Writes orders, prepares discharge paperwork –outlines a summary for the intern to dictate.

• "Tremendous initiative: attending new to LPCH didn't know how to read results of a pH probe. xxx learned on her own how to interpret the findings and presented what she learned to the team."
Below are comments from actual evaluations which demonstrate sub-par performance:

- Forgets to ask important details. Leaves out entire sections of the history (e.g. past history, medications, allergies).

- Resident often feels the need to repeat the entire history and exam because the information gathered by the student was incomplete.

- Often presents numbers (vital signs, intake and output) that are inaccurate. Takes information from residents’ notes rather than verifying it herself.

- Notes are often incomplete—specifically didn’t include plans of care. Resident who usually signs students’ notes without editing felt the need to include extensive addenda.

- In response to questions, xxx couldn’t answer: attending would backtrack and ask a simpler, more fundamental question. Ultimately, had to go very far back to basics to find something xxx could answer correctly.

- Responses to even simple questions are superficial and are not enhanced with probing. “Self-directed learning has been less than evident to date.”

- Seems anxious, awkward with patients and families, to the point that families are uncomfortable.

- “Decided not to call an interpreter, even when the patient asked for one.”

- Refers to patient by diagnosis, rather than by name.

- “Slept through a number of student conferences and generally opted not to take advantage of additional opportunities for learning, particularly when these occurred at the end of the day (e.g., mock code, procedures).”

- On call, opted to sleep rather than participate in admitting patients. Left early, without notifying anyone or communicating results of a study she was asked to follow-up on.”

- “Informed attending that he didn’t care about the evaluation for his clerkship.”

- Shows little initiative to pick up new patients. Arrives 5-15 minutes before round – too late for new patients

- "Chose to skip parts of the H&P that she decided were unimportant; stated that formulating a full differential diagnosis was unnecessary that in practice, one could rely on consultants to solve puzzling problems"

- Observed to be:
  - Reading a book during a busy clinic
  - Texting during PICU rounds and conferences
  - Attending to personal matters on the phone while patients were waiting to be seen in clinic
  - Slipping off in clinic to a separate work room to surf the web.

*Based on typical performance during first clinical year
# Med 300 Final Evaluation

**Name of Student_____________________________________**  
**Period___________**

**Did you personally provide medical care or mental health counseling to this student?** *(Question 1 of 13 - Mandatory)*  
*(IMPORTANT: Please suspend this evaluation if you checked YES below.)*

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Time spent with the student:**

- 1-5 Days
- 1-2 Weeks
- 2-3 Weeks
- 3-4 Weeks

**Evaluator Role:**

- Attending
- Resident
- Intern
- Other

Please indicate whether each of the following statements is true, based on your personal observations of this student’s performance. If you worked with the student for several days or weeks, base your responses on the student’s work at the end of your time together. Use the text box to provide details and examples. *(Question 4 of 13 - Mandatory)*

<table>
<thead>
<tr>
<th>REPORTER:</th>
<th>Consistently True</th>
<th>Sometimes True</th>
<th>Rarely or Never True</th>
<th>Unable to Assess</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Obtains an accurate, complete and detailed H&amp;P.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Presents patient data clearly and logically, following a standard format, with good command of medical terminology.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

*(Question 5 of 13 - Mandatory)*

<table>
<thead>
<tr>
<th>INTERPRETER:</th>
<th>Consistently True</th>
<th>Sometimes True</th>
<th>Rarely or Never True</th>
<th>Unable to Assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathers data efficiently. Focuses H&amp;P and adapts presentation to the situation/reason for visit or hospitalization.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Selectively presents pertinent information.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Synthesizes and concisely summarizes data.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Interprets clinical findings to independently offer an accurate working diagnosis and prioritized differential diagnosis and/or problem list.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
### Describes the pathophysiology or rationale underlying each possible diagnosis when relevant to patient care

<table>
<thead>
<tr>
<th>Manager/Educator: Describes the pathophysiology or rationale underlying each possible diagnosis when relevant to patient care</th>
<th>Consistently True</th>
<th>Sometimes True</th>
<th>Rarely or Never True</th>
<th>Unable to Assess</th>
</tr>
</thead>
</table>

### (Question 6 of 13 - Mandatory)

<table>
<thead>
<tr>
<th>MANAGER/EDUCATOR:</th>
<th>Consistently True</th>
<th>Sometimes True</th>
<th>Rarely or Never True</th>
<th>Unable to Assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers a reasonable plan for testing and/or treatment, including needs beyond the immediate hospitalization or clinic visit.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Incorporates patients’ work and home situations, values and preferences in treatment planning recommendations.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Discusses the risks, benefits, and costs of tests and treatments and of alternative choices. Demonstrates awareness of the sensitivity and specificity of lab tests and imaging modalities.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Incorporates information from reference resources and clinical studies in developing evaluation and treatment plans.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Serves as a primary provider in patient care. Trusted by the preceptor/team to manage tasks, e.g. calling consults, speaking with outside physicians, arranging discharges, following up labs and studies. Contributes substantially to patient management.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

### Examples and Descriptions of Performance: Patient Care (Question 7 of 13)

Comments may include details about clinical skills, fund of knowledge, or application of knowledge to clinical care.

### Suggestions for Improvement - Patient Care: (Question 8 of 13)
Fundamentals of Professionalism and Interpersonal Communication: Did the student meet expectations for professionalism in all of the following domains? (Question 9 of 13 - Mandatory)

- Communication and relationships with patients and families
- Communication and relationships with students, faculty, staff
- Reliability, responsibility
- Commitment to Excellence: self-improvement, adaptability, efforts to gather and respond to feedback
- Honesty, integrity, adherence to ethical practice principles

<table>
<thead>
<tr>
<th>Concerns in one or more domains (comment required)</th>
<th>Meets expectations in all domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Concerns or suggestions for improvement - Professionalism and Interpersonal Communication: (Question 10 of 13)

Which - if any - of the following behaviors have you observed? CHECK ALL THAT APPLY. Provide examples in the field below. (Question 11 of 13 - Mandatory)

<table>
<thead>
<tr>
<th>Selection</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>Extends him/herself beyond usual duties to ensure patients' comfort or well-being.</td>
</tr>
<tr>
<td>☐</td>
<td>Advocates respectfully and diplomatically on behalf of patients.</td>
</tr>
<tr>
<td>☐</td>
<td>Serves as patients' preferred source of information and/or support.</td>
</tr>
<tr>
<td>☐</td>
<td>Makes an extra effort to support or help fellow students and others excel.</td>
</tr>
<tr>
<td>☐</td>
<td>Without prompting, takes on extra work to help the team/preceptor.</td>
</tr>
<tr>
<td>☐</td>
<td>Supports the team by paying attention to the needs and care plans of patients other than those assigned.</td>
</tr>
<tr>
<td>☐</td>
<td>Maintains composure and manages conflict in difficult situations.</td>
</tr>
<tr>
<td>☐</td>
<td>Makes an extra effort to participate in learning opportunities beyond those required.</td>
</tr>
<tr>
<td>☐</td>
<td>Seeks and responds openly and proactively to feedback.</td>
</tr>
<tr>
<td>☐</td>
<td>Demonstrates an advanced degree of personal responsibility and accountability— beyond being punctual and reliable.</td>
</tr>
<tr>
<td>☐</td>
<td>I have not observed any of the above behaviors.</td>
</tr>
<tr>
<td>☐</td>
<td>I have not spent enough time with the student to make an assessment.</td>
</tr>
</tbody>
</table>
Examples of exceptional Professionalism and Interpersonal Communication: (Question 12 of 13)

Overall, do you feel that this student performed at an advanced level for a student on a required clerkship, i.e. at the level of a sub-intern or beyond? (Question 13 of 13 - Mandatory)

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
<th>Unable to Assess</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Name of Evaluator _________________________________
Structured Clinical Observation: History

<table>
<thead>
<tr>
<th>Student…</th>
<th>Done Well</th>
<th>Something to focus on</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduces self and explains role</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Inquires thoroughly about the chief complaint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Includes elements of history &amp; level of detail appropriate to reason for visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clarifies past medical history</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clarifies medication list</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Asks review of systems in level of detail appropriate to chief complaint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clarifies social history in level of detail appropriate to chief complaint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clarifies family history in level of detail appropriate to chief complaint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Manages time efficiently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Conveys support, concern, respect (verbally and non-verbally)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Avoids using medical jargon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMENTS: (Please provide details to the student about what was done well and what aspects of the exam could still improve.)

RESIDENT/ATTENDING: ____________________________________________________________

Please Fax completed form to Nancy D'Amico at 650-724-1309
Structured Clinical Observation: Physical Exam

<table>
<thead>
<tr>
<th></th>
<th>Done Well</th>
<th>Something to focus on</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washes hands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Includes elements of exam &amp; level of detail appropriate to reason for visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates correct exam technique (please mark organ systems examined and provide specific feedback below in the comments section)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head and Neck</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdominal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genitourinary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elicits accurate findings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preserves modesty</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMENTS: (Please provide details to the student about what was done well and what aspects of the exam could still improve.)

Please Fax completed form to Nancy D’Amico at 650-724-1309
Patient feedback form:  COMMUNICATION ASSESSMENT TOOL

NAME OF MEDICAL STUDENT ________________________________________________

Communication with patients is a very important part of quality medical care. We would like to know how you feel about the way this medical student communicated with you.

Your answers are completely confidential and will not affect your child’s medical treatment in any way, so please be as open and honest as you can.

The medical student...  Poor   Fair   Good   Very Good   Excellent

1. Greeted me in a way that made me feel comfortable  1   2   3   4   5

2. Treated me with respect  1   2   3   4   5

3. Showed interest in my ideas about my health  1   2   3   4   5

4. Understood my main health concerns  1   2   3   4   5

5. Paid attention to me (looked at me, listened carefully)  1   2   3   4   5

6. Let me talk without interruptions  1   2   3   4   5

7. Gave me as much information as I wanted  1   2   3   4   5

8. Talked in terms I could understand  1   2   3   4   5

9. Checked to be sure I understood everything  1   2   3   4   5

10. Encouraged me to ask questions  1   2   3   4   5

11. Involved me in decisions as much as I wanted  1   2   3   4   5

12. Discussed next steps, including any follow-up plans  1   2   3   4   5

13. Showed care and concern  1   2   3   4   5

14. Spent the right amount of time with me  1   2   3   4   5

Optional questions:

What did you like about this medical student’s communication?

How can this medical student improve?

Do you have any other comments, questions, or concerns?
EVALUACIÓN DE LA COMUNICACIÓN (Español)

NOMBRE DEL ESTUDIANTE MÉDICO _______________________________________

La comunicación con los pacientes es una parte muy importante del tratamiento médico de calidad. Nos gustaría saber su opinión sobre la forma en que su estudiante médico se comunicó con usted.

Sus respuestas son absolutamente confidenciales y no afectarán su tratamiento médico en modo alguno, así que por favor sea lo más abierto y sincero posible.

<table>
<thead>
<tr>
<th>El estudiante médico...</th>
<th>Pobre</th>
<th>Aceptable</th>
<th>Bueno</th>
<th>Muy Bueno</th>
<th>Excelente</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Me saludó de una manera que me hizo sentir cómodo/a</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Me trató con respeto</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Mostró interés en mis ideas sobre mi salud</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Comprendió mis principales preocupaciones sobre mi salud</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Me puso atención (me miró, escuchó cuidadosamente)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Me dejó hablar sin interrupciones</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Me dio toda la información que yo quería</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Habló en términos que pude entender</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Se aseguró que entendí todo lo que me dijo</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Me animó a hacerle preguntas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Me incluyó en decisiones hasta donde yo quería participar</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Habló conmigo de los siguientes pasos sobre mi tratamiento, incluso de los planes de seguimiento</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Mostró su interés y preocupación</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Me dedicó la cantidad debida de tiempo</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Preguntas Opcionales:

¿Qué le gustó de la manera de comunicarse del estudiante médico?

¿En qué puede mejorar el estudiante médico?

¿Tiene usted algún otro comentario, pregunta o inquietud
Multi-Source Feedback link/instructions

Evaluators are provided with the following link to complete a professionalism evaluation:

http://researchandevaluation.stanford.edu/prof

If an evaluator has any questions about completing a student evaluation they may contact clerkship coordinator Nancy D’Amico at ndamico@stanford.edu
POLICIES

Department of Medicine

ATTENDANCE

Attendance is taken seriously, so make sure you are familiar with the requirements:

• Absences

  1. All absences must be approved by your clerkship director. Students are allowed 3 days of excused absences on 8-week rotations. Absences extending beyond 3 days require additional make-up time.

  2. You must make up for any absences of more than 3 days, regardless of the reason for the absence. The MD Program Handbook (p. 87) cites “excessive or unexcused absences, or failure to communicate with appropriate clerkship staff about unavoidable absences” under reasons for failing a clerkship.

  3. You are responsible for notifying site director, team attending and team resident when out with illness. Make sure you have their contact information easily available.

• Education: We expect you to read the assigned reading and complete your patient logs, either on your own or during case discussion over the eight-week period. Small group discussions will reinforce these topics, but cannot substitute for your reading. The second kind of reading you will do is to read relevant and current literature on patients under your care, and contribute to the education of the team through presenting on various topics.

• We expect you to be on time to attend all student-specific lectures and rounds. This means you may need to leave noon conferences early to get to teaching sessions on time.

• Please come prepared by reading assigned material before sessions.

• You are expected to be at all team rounds as this is where most of the clinical teaching takes place.

• You are expected to pick up two admissions on call and follow patients through their hospital stay.

• You will be the primary provider, with close supervision of your intern and resident. On call days, you are expected to go home only when clinical stability has been achieved with your patients at 10 p.m.

SPECIAL NOTE

Site-specific overnight call requirements supersede these general guidelines
School of Medicine

As a Stanford SOM student, you are responsible for all the policies and procedures covered in the MD Program Handbook & Policy Manual (https://med.stanford.edu/md/mdhandbook/section-3-md-requirements-procedures.html).

The Policies below have been included for your reference.

**ABSENCE POLICY AND EXPECTATIONS**

It is the student’s professional responsibility to review the absence policy and specific attendance requirements for all courses, clerkships and curricular activities in which he/she is involved. Students should avoid scheduling or participating in activities that directly conflict with required courses or clerkships.

**Required Courses**

1. Students are expected to be present at ALL required-attendance sessions and final exams. It is the student’s responsibility to be aware of the attendance expectations for each course.

2. If a student anticipates missing a required-attendance session, he/she must communicate and receive approval from the course director at a minimum of two-weeks in advance. In cases involving illness and unexpected emergencies, students should notify their course director as soon as possible submit a notification form (see below) thereafter.
   a. Once approval is granted, students will be required to complete the online notification form (https://stanfordmedicine.qualtrics.com/SE/?SID=SV_6tKAAjJij9PCM2yN) to confirm the absence. If the student and course director are unable to agree on the appropriateness of an absence for a required session, they are encouraged to schedule a meeting with the course director and their assigned Advising Dean to discuss the absence further.
   b. Approval of all absences is at the discretion of the course director.
   c. If an absence is not approved it is expected that the student will make the necessary arrangements to change his/her schedule to be present.

3. Students are responsible for the content and work associated with all missed sessions. Students are also expected to meet the participation requirement and contribute to their group’s learning, even for sessions missed, and must work out an equitable solution that balances the individual student’s needs with the needs of the group. Under no circumstances will an absence relieve a student of meeting all of the academic requirements of the course. If the absence request conflicts with a session or sessions that cannot be otherwise made up or completed, the student is advised that the absence may affect his or performance evaluation in the course.

4. The following are considered professionalism issues that may result in a referral to Committee on Performance, Professionalism, and Promotion (CP3):
   a. Absence from a required session without obtaining advance approval
   b. Failure to communicate with the course director;
   c. Failure to complete the online absence notification
   d. Trend in number of absences across courses

Please note that each student is responsible for requesting approval for their own absence; no group approvals will be granted.
Required Clerkships

Students are expected to attend 100% of all scheduled clerkship activities.

Students who miss more than 10% of scheduled time - for any reason - will be required to make up missed time.

Students who will miss more than 20% of the total duration of a clerkship – for any reason – will be asked to reschedule the clerkship.

Students must contact the clerkship director to obtain advance approval for any unavoidable absence from the clerkship. Unanticipated absences for illness or emergency must be communicated to the clerkship director as promptly as possible.

a. If a student is absent without obtaining advance approval from the clerkship director; the absence will be recorded and reported to the CP3.

b. Approval of all absences is at the discretion of the clerkship director.

c. If an absence is not approved, it is expected that the student will make the necessary arrangements to change his/her schedule to be present.

d. Failure to communicate with the clerkship director about unavoidable absences is a potential reason for failing the clerkship.

Students are expected to seek necessary health care to maintain their physical and mental well-being. Examples of necessary health care include preventive health services, visits for acute illness, ongoing care for chronic illnesses, physical therapy, and counseling and psychological services. Students have a right to privacy when seeking care.

For planned absences related to healthcare, students must contact the clerkship director, site director, and preceptor or patient care team in advance to coordinate time away from the clerkship. Students need not disclose the specific type of healthcare that is being sought. A student’s decision to seek healthcare during a clerkship should have no impact on his or her performance evaluation.

Students who will miss more than 20% of the total duration of a clerkship – for any reason – will be asked to reschedule the clerkship.

Excessive or unexcused absences or failure to communicate with the clerkship director about unavoidable absences are considered reasons for failing the clerkship.
Student Duty Hours and the Work Environment

Providing students with a sound academic and clinical education must be carefully planned and balanced with concerns for patient safety and student well-being.

Supervision of students

All patient care must be supervised by qualified physicians or non-physician designees operating within their scope of practice.

Faculty, residents and students must be educated to recognize the signs of fatigue, and adopt and apply policies to prevent and counteract the potential negative effects.

Duty hours

Duty hours are defined as all clinical and academic activities related to the students, i.e., patient care (both inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled academic activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.

Students must be provided with one day in seven free from all educational and clinical responsibilities, averaged over a four-week period, inclusive of call. One day is defined as one continuous 24-hour period free from all clinical, academic, and administrative activities.

In-house call activities

The objective of all call activities is to provide students with continuity of patient care experiences throughout a 24-hour period. In-house call is defined as those duty hours beyond the normal workday when students are required to be immediately available in the assigned institution.

In-house call must occur no more frequently than every third night, averaged over a four-week period.

Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours.

Students must have a minimum of 8-hours free of duty between scheduled duty periods.

Students must have a minimum of 14-hours free of duty after 24-hours of in-house duty.
Dress Code

Any time students see patients; they must adhere to the dress code described below. Dress code guidelines must be followed at all encounters with patients, standardized or real.

Students are expected to dress professionally and conservatively. Attire typically worn to class or lecture will in many cases not be appropriate. Hospital scrubs are not considered professional attire for patient encounters.

- Always bring your white coat. Your coat must be clean, pressed and worn at all times, unless you are directed otherwise by the supervising physician

- Wear your nametag in an easily viewable location (collar of coat, top, or dress)

- Do not wear cologne or perfumes

- Tattoos should be covered

- Jewelry should be minimal and understated

- Clothing should not have rips, tears or frayed edges

- Do not expose your midriff

- Clothing should allow for an appropriate range of movement, and should not be flashy or draw attention

- Button-down shirts (with or without ties), professional tops, or blouses should be worn and should avoid low-cut necklines

- Tank tops, T-shirts, and thin or “spaghetti-style” straps on tops are not appropriate.

- Pants, slacks, khakis, skirts, or dresses are appropriate. Legs should be covered to the knee

- Do not wear jeans or shorts

- Dress shoes, low heels, or flats should be worn. Avoid open-toed shoes, flip flops, tennis shoes, or porous shoes
Definition of Medical Student Practice Role

California state law allows specific exceptions for medical students to the general code, which requires that all medical acts must be performed by licensed physicians. The exception specifies that a student may do all things that a physician may do with the following provisos:

- That any medically-related activity performed by students be part of the course of study of an approved medical school; and
- That any medically-related activity performed by students be under the proper direction and supervision of the faculty of an approved medical school.
- Where clinically and educationally appropriate, physicians who are supervising medical students may delegate responsibility for some elements of teaching and supervision to non-physician care providers, e.g. allied health professionals, nurses, respiratory therapists, etc. within the institution. It will be the responsibility of each supervising physician to determine which learning experiences are appropriately delegated in this manner and to ensure that non-physicians providing such supervision are working within their scope of practice.

Medical students may therefore write orders for drugs, treatments, etc., provided that:

1. the provisions of number 2 above are observed;
2. the students are assigned to or are consultants to the service on which the order pertains; and
3. a licensed physician countersigns all orders before the orders are executed. Telephone orders of counter-signatures will be accepted from licensed physicians (including licensed housestaff). Medical students may locate and solicit the licensed physician’s verification by telephone, but the licensed physician must speak directly to the registered nurse and must actually sign the order before going off duty. The counter-signature is recorded as a telephone order. Routine admission orders are not exempted from the above provisions.

Medical students acting as subinterns, are still subject to the above provisions.

Medical students will identify their signatures with CC (Clinical Clerk) or MS (Medical Student), just as licensed physicians identify their signatures with MD. Medical students will also wear badges identifying them as medical students.

Medical students are not to be involved in any portion of the medical care of other medical students.
Fostering a Respectful Learning Environment

Information Sheet for Reporting Concerns of Mistreatment

What are the Standards of Conduct for the Teacher-Learner Relationship?

It is a policy of Stanford School of Medicine that outlines the shared commitment among all members of the SoM community to respect each person’s worth and dignity and to contribute to a positive learning environment where medical students are enabled and encouraged to excel. The full policy is in the MD Program Handbook: [http://med.stanford.edu/md/policies/](http://med.stanford.edu/md/policies/)

Where do I go to report concerns of mistreatment or violations to the Standards of Conduct for the Teacher-Learner Relationship?

You can report concerns to the Respectful Educator Conduct Committee (RECC). As a first step, please contact the chair of RECC, Rebecca Smith-Coggins, MD, at smithcog@stanford.edu or pager 13481 through the Stanford University operator, to confidentially review all options available.

The purpose of the RECC is to educate and raise awareness of our standards for respectful educator conduct, to enable a procedure by which students can report concerns of student mistreatment or violations of the Standards of Conduct for the Teacher-Learner Relationship without fear of retaliation, and to address solutions for these concerns.

What type of concerns should I bring to the attention of the RECC?

Any potential violations of the Standards of Conduct for the Teacher-Learner Relationship, such as:

- Humiliation or verbal abuse
- Physical abuse
- Requiring a student to perform personal services (such as shopping or babysitting)
- Assigning duties as punishment rather than education
- Unwarranted exclusion from reasonable learning or professional opportunities
- Evaluating or grading on inappropriate criteria
- Harassment or discrimination on the basis of sex, race, age, color, disability, religion, sexual orientation, gender identity, national or ethnic origin.

If there is any behavior you are subjected to or that you witness that makes you uncomfortable or that you feel is inappropriate, please bring it to the RECC.

What other resources are available to report concerns?

The SoM has an Ombudsperson, James Laflin, who can be contacted at (650) 498-5744 or jlaflin@stanford.edu. The Ombudsperson provides a neutral, confidential and independent resource for dispute resolution for faculty, residents, postdoctoral scholars and students. The ombudsperson assists members of the School of Medicine community with any work related difficulty, including interpersonal conflict or misunderstandings, as well as academic or administrative concerns. [http://med.stanford.edu/ombuds/](http://med.stanford.edu/ombuds/)
Universal Precautions and Needlestick Protocol

Universal Precautions apply to the handling of all blood, body fluids, and human tissue. Body fluids, also known as other potentially infectious materials (OPIM), include: semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids, feces, urine, sputum, nasal secretions, saliva, tears, vomitus or any other body fluid or tissue that is visibly contaminated with blood. Appropriate protection including gloves, mask and gown should be worn to protect oneself from exposure.

If you are stuck by a needle or splashed with bloody fluid (on to your mucous membrane or wound), this is what you do immediately!

CLEANSE: Rinse copiously.

CALL: Call the needlestick hotline 24/7/365 from all hospital sites. Pager 1-STIX (1-7849). If in SHC/LPCH dial 222 then follow prompts to page. If at a non-Stanford facility, such as SCVMC, PAVA, Cardinal Free Clinics, etc. dial (650)723-8222. and then enter 1-7849 when prompted. Follow additional instructions to enter your phone number and receive a return call.

A trained professional will call you back, decide if you need post-exposure prophylaxis and work with you to get medication expeditiously from a pharmacy nearest to you. Most students do not need to go to the Emergency Department or Occupational Health initially. There is no charge if you use the 1-STIX hotline for blood tests, medication or initial follow-up care.

Follow up appointment may be needed but this will be recommended by the 1-STIX professional staff person. This has been set up especially for Stanford medical students and employees so that it is QUICK, CONFIDENTIAL and with NO CHARGE. Records are kept confidential in accordance with applicable laws so that it does not become a part of your health care record. This is a protection for you.

If you have any problems with the hotline, please call Dr. Rebecca Smith-Coggins immediately. Dr. Smith-Coggins can be reached through the hospital page system at 650-723-6661 at pager 13481.

If you choose to go to the Emergency Department, the hospital will charge you and it will go on your health care record. Please call the needlestick hotline first.
Protecting Patient Privacy During Clerkships - Practices That Put Confidentiality at Risk:

The following are examples of situations in which clerkship students might inadvertently violate HIPAA regulations and put Protected Health Information (PHI) at risk.

- Laptop or other device with PHI/access to PHI left in car during on-the-way home trip to grocery store
- Laptop or other device left in an unsecure hospital area while scrubbed in in the operating room – or left in OR or staff break room
- Patient sticker/ chart label left in coat/scrub shirt pocket – taken home/misplaced
- Lab coat pockets with printed patient information left in public area while in OR or at noon conference
- End-of-shift student evaluation forms or other paperwork containing PHI carried home in backpack – left unattended
- Use of new laptop/tablet/mobile phone prior to Stanford SOM encryption
- Copies of patient information left on fax or copy machine
- Paper chart left behind in clinic exam room and new patient comes in
- Team rounding list left at nurses’ station in patient care unit – or dropped in hall, parking lot, etc.
- Hard copies of lab data, clinical notes, EKGs, etc. with patient identifiers left in public areas
- Failure to log out of electronic medical record (EMR) system at any workstation or mobile computer (WOW/COW)
- Student is asked by busy, distracted resident to present a patient case in the elevator “on the fly”
- Team comment in elevator about patient to be seen next
- Clinic door or conference room left open during patient presentations
- Family member stops team member in the hall or cafeteria, potentially prompting public discussion of PHI
- Auto-forwarding text pages with PHI to personal mobile phone
- Personal computer with remote access set to auto-fill EMR passwords
- PHI entered in E*Value (evaluation system) notes or reflections for patient logs

Please be vigilant when working with Protected Health Information.
Professionalism and Mobile Devices

Because personal computing devices are becoming more and more portable — laptops, smart phones, USB thumb drives, etc. — securing the sensitive information stored on those devices is more important than ever. And some new laws have been passed, holding the individual personally and fiscally liable in the event of information disclosure. Students are expected to review and follow the policies outlined below:

Mobile Device Management

https://itservices.stanford.edu/service/mobiledevice/management

If you have an iPhone, iPad, or iPod Touch, there's an easy way to set up and maintain proper security practices on your device. Mobile Device Management (MDM) is free to install, and automatically configures your device to be optimized for the Stanford environment—from email settings to security settings. Visit our page on MDM for more information about the service.

Stanford SOM Course Content Access and Appropriate Use Policy

http://med.stanford.edu/irt/edtech/policies/course_content_access.html

Stanford students may only use Stanford University School of Medicine course materials as intended for curriculum and course-related purposes. These materials are copyrighted by the University or others. Access to this content is for personal academic study and review purposes only. Unless otherwise stated in writing, students may not share, distribute, modify, transmit, reuse, sell, or disseminate any of this content.

Restricted Data and HIPAA Compliance
http://www.stanford.edu/group/security/securecomputing/dataclass_chart.html

Students must protect their laptops, tablets and mobile devices by following Stanford University mobile device security guidelines (especially by having a security passcode set and encrypting the backup) to protect any Stanford Confidential Information that may be accessible on their device. Students must not access or store Stanford Prohibited Information on their tablets or mobile devices as they are not intended for the storage of Restricted Information, specifically including Protected Health Information (PHI). Definitions of terms are provided on the website linked above.

Stanford University Computer and Network Usage Policy


Students must respect copyrights and licenses, respect the integrity of computer based information resources and refrain from seeking to gain unauthorized access, and respect the rights of other information resource users.

Clinical Rotations at Stanford Affiliated Entities

The Stanford Privacy Office Guidelines on Clinical Rotations at Stanford Affiliated Entities that establishes the student’s obligation to comply with the privacy policies of the affiliated organization and also includes other best practices for securing and protecting PHI and information on student responsibilities when subject to the specific policies of the affiliated entity.
Appendix A: Clinical Site Maps and Directions

SANTA CLARA VALLEY MEDICAL CENTER
751 South Bascom Avenue, San Jose, CA 95128

Directions to Santa Clara Valley Medical Center

From San Francisco, Palo Alto, Sunnyvale - 101 South

- Take 101 to 280 North to Bascom exit.
- Follow access road, turn left on Bascom, right on Renova.

From San Francisco, Palo Alto, Santa Clara - 280 South

- Take 280 to Winchester/Stevens Creek exit.
- Turn left onto Moorpark, right onto Turner, left onto Renova.

From Santa Cruz, Los Gatos, Campbell - 17 North

- Take 17 to Hamilton exit.
- Turn right onto Hamilton, left onto Bascom, left on Renova.

From Oakland, Milpitas, San Jose - 880/17 South

- Take 880 South, exit at Bascom Avenue.
- Turn left onto Bascom, right on Renova.

From Gilroy, Morgan Hill - 101 North

- Take 101 to 280 North to Bascom exit.
- Turn left on Bascom, right on Renova.

Information for first day and parking info:

1. Park in any spot in employee parking; the entrance is on Ginger Lane.

2. When you exit the parking lot, take a right on Turner Drive and go through the main hospital entrance, which is near the emergency room.

3. Take the K1 elevators (to the right of the entrance) up to the 4th floor.

4. Take a right and then a left into the Department of Medicine, to room 4C005, where the orientation will take place.

Emi Williams – Clerkship Coordinator - 408-885-7724
Kaiser Santa Clara Medical Center
710 Lawrence Expressway, Santa Clara, CA 95051

Directions to Kaiser Santa Clara Medical Center

From I-280 South:

- Take the Lawrence Expressway exit, going North. Turn left at Stevens Creek Blvd.
- Make a Left turn onto Lawrence Expressway.
- After crossing Pruneridge Avenue, turn left into the Medical Center at Lehigh Drive.
  (There is a signal light there.)

From I-680/280 North:

- At the 680/280 junction stay on 280 going North.
- Take the Lawrence Expressway Exit, going North.
- After crossing Pruneridge Avenue, turn left into the Medical Center at Lehigh Drive.
  (There is a signal light there.)

From I-880/17:

- Take the 280 North exit. Take the Lawrence Expressway Exit, going North.
- After crossing Pruneridge Avenue, turn left into the Medical Center at Lehigh Drive.
  (There is a signal light there.)

From 101 South:

- Take the Lawrence Expressway exit, going South.
- After crossing Homestead Road, turn right into the Medical Center at Lehigh Drive.
  (There is a signal light there.)

From 101 North:

- At the junction of the 101 and the 280, take 280 North exit. Take the Lawrence Expressway exit, going North.
- After crossing Pruneridge Avenue, turn left into the Medical Center at Lehigh Drive.
Map of area surrounding Kaiser Santa Clara Medical Center
Veterans Administration Palo Alto Health Care System
3801 Miranda Avenue, Palo Alto, CA 94304

Driving Directions to Veterans Administration – Palo Alto

From Highway 280, exit at Page Mill Road. Turn right onto Foothill Expressway. Turn left onto Miranda Ave. The hospital will be on your left.

NOTE: Parking at the VA is impacted due to construction. For current parking information, please visit the following link:

http://www.paloalto.va.gov/parking_paloalto.asp
## Appendix B: Medical Student Wellness Resource List

<table>
<thead>
<tr>
<th>TYPE OF CONCERN</th>
<th>RESOURCES</th>
</tr>
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</table>
| Advice about where to seek help or general wellness concerns including: Health (incl. disability) Housing Relationships Finances Judicial and legal matters Professionalism Mistreatment | Office of Medical Student Wellness  
Main office: 650-497--5846; somwellness@stanford.edu  
Rebecca Smith-Coggins: Pager 1-3481; smithcog@stanford.edu |
| Academic Concerns | School of Medicine Education Specialist  
Lisa Medoff  
650-721-1025; lmedoff@stanford.edu  
Advising Deans  
http://med.stanford.edu/md/advising/resources/  
Neil Gesundheit: neil7@stanford.edu  
Susan Knox: sknox@stanford.edu  
Amy Ladd: alad@stanford.edu  
Eric Sibley: eric.sibley@stanford.edu |
| Clinical & Professional Skills | Educators-for-CARE Faculty  
http://med.stanford.edu/e4c/  
Preetha Basaviah, pree@stanford.edu  
Sumit Bhargava, sumitb@stanford.edu  
Martin Bronk, mbronk@stanfordmed.org  
Bertha Chen, bchen@stanford.edu  
Jeffrey Chi, jchi1@stanford.edu  
Doug Fredrick, dfred@stanford.edu  
Julieta Gabiola, jgabiola@stanford.edu  
Paula Hillard, paula.hillard@stanford.edu  
John Kugler, jkugler@stanford.edu  
Lars Osterberg, larso@stanford.edu  
Julie Pantaleoni, juliep11@stanford.edu  
Peter Pompei, pompei@stanford.edu  
Debbie Sakai, dsak1@stanford.edu  
Erika Schillinger, erikas@stanford.edu  
Jacqueline Tai, jstai@stanford.edu  
Nounou Taleghani, nounou@stanford.edu  
Mickey Trockel, trockel@stanford.edu |
| Financial Concerns | Office of Financial Aid  
650-723-6958; md_financial_aid@stanford.edu |
<table>
<thead>
<tr>
<th>Service Area</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>Dispute Resolution</td>
<td>School of Medicine Ombudsperson</td>
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<tr>
<td></td>
<td>James Laflin</td>
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<td></td>
<td><a href="http://med.stanford.edu/ombuds/">http://med.stanford.edu/ombuds/</a></td>
</tr>
<tr>
<td></td>
<td>650-498-5744; <a href="mailto:jlaflin@stanford.edu">jlaflin@stanford.edu</a></td>
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<tr>
<td>Diversity and Inclusion</td>
<td>Center of Excellence and Diversity in Medical Education</td>
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<td></td>
<td><a href="http://med.stanford.edu/coe/">http://med.stanford.edu/coe/</a></td>
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<tr>
<td></td>
<td><a href="mailto:coeoutreach@stanford.edu">coeoutreach@stanford.edu</a></td>
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<tr>
<td>Infectious Exposures</td>
<td>Needles stick Hotline</td>
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<td></td>
<td>If you are stuck by a needle or splashed with bloody fluid,</td>
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<td></td>
<td>rinse copiously and call the hotline 24/7/365 from all</td>
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<td></td>
<td>hospital sites. Pager 1-STIX (1-7849).</td>
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<td></td>
<td>If in SHC/LPCH, dial 222 and then follow the prompts to</td>
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<td></td>
<td>page.</td>
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<td></td>
<td>If in SCVMC, PAVA, or Cardinal Free clinics, dial 650-723-8222 and then follow the prompts to page.</td>
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<tr>
<td>Mental Health</td>
<td>Counseling and Psychological Services (CAPS)</td>
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<tr>
<td></td>
<td><a href="http://caps.stanford.edu/">http://caps.stanford.edu/</a></td>
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<tr>
<td></td>
<td>650-723-3785</td>
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<tr>
<td>Physical Health</td>
<td>Medical Care @ Vaden Health Center</td>
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<td></td>
<td><a href="http://vaden.stanford.edu/">http://vaden.stanford.edu/</a></td>
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<tr>
<td></td>
<td>650-498-2336</td>
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<tr>
<td>Physician Wellness</td>
<td>Stanford Committee for Professional Satisfaction and</td>
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<td></td>
<td>Support</td>
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<td></td>
<td><a href="http://wellmd.stanford.edu">http://wellmd.stanford.edu</a></td>
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<tr>
<td>Spiritual Support</td>
<td>Office of Religious Life</td>
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<tr>
<td></td>
<td><a href="http://religiouslife.stanford.edu">http://religiouslife.stanford.edu</a></td>
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<tr>
<td></td>
<td>650-723-1762; <a href="mailto:religious-life@stanford.edu">religious-life@stanford.edu</a></td>
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<tr>
<td>Sexual Assault or Interpersonal</td>
<td>Office of Sexual Assault &amp; Relationship Abuse Education</td>
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<tr>
<td>Violence</td>
<td>&amp; Response (SARA)</td>
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<tr>
<td></td>
<td><a href="http://studentaffairs.stanford.edu/sara">http://studentaffairs.stanford.edu/sara</a></td>
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<tr>
<td></td>
<td>650-725-9129; <a href="mailto:saraoffice@stanford.edu">saraoffice@stanford.edu</a></td>
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<tr>
<td></td>
<td>National Domestic Violence Hotline</td>
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<td></td>
<td>(24/7 confidential support)</td>
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<tr>
<td></td>
<td>800-799-7233; <a href="http://www.th">http://www.th</a> hotline.org</td>
</tr>
</tbody>
</table>
| Sexual Harassment | Sexual Harassment Policy Office  
|                  | http://harass.stanford.edu  
|                  | 650-724-2120 or 650-723-1583; harass@stanford.edu |
| Substance Use and other Addictions | Stanford Addiction Medicine Program  
|                                  | Anna Lembke  
|                                  | 650-725-9570; alembke@stanford.edu  
|                                  | Casa Columbia  
|                                  | http://www.casacolumbia.org |
William Osler (1849 – 1919)

William Osler continues to be one of the most famous and familiar names in medicine, despite the fact that he died in 1919. His name might come up on rounds, and in conversations outside of medicine. Try this Reverse Medical Jeopardy to see what you already know about Osler.

(Answers at the end of this section.)

**Medical Jeopardy: Osler for 11 Points**

1. Who are Halsted, Welch and Kelly, and what do they have to do with Osler?

6. What four eponymous diseases or signs invoke Osler’s name?

2. What book is Osler most famous for?

7. Which famous surgeon won the Pulitzer Prize for his two-volume biography of Osler?

3. Who was Egerton Yorrick Davis and what is penis captivus?

8. What was Osler’s final academic position?

4. What was special about Osler and his use of time?

9. What is the one thing for which Osler might have traded his fame and honors?

5. What is Aequanimitas?

10. What was the illness which caused Osler’s death?

11. What did Osler want his epitaph to read?
EXCERPTS FROM OSLER: INSPIRATIONS FROM A GREAT PHYSICIAN

Charles Bryan, MD, is the Heyward Gibbes Distinguished Professor of Medicine, at the University of South Carolina School Of Medicine, and is also treasurer of the Osler Society. Charles is a wonderful internist and writer. One of his books is Osler: Inspirations from a Great Physician (Oxford University Press, New York, 1997). In it, he looks at Osler’s incredible time-management skills and compares them with methods taught in books such as Covey’s Seven Habits of Highly Effective People and other self-help books.

Below, I have taken the chapter headings from Charlie’s book and picked a few Osler quotes that apply. This is a poor substitute for reading Bryan’s book, which is full of Bryan’s own practical advice, as well as many, many Osler quotes—the material below is just to whet your appetite.

1. Manage Time Well: Day-tight Compartments

‘The way of life I preach is a habit to be acquired gradually by long and steady repetition. It is the practice of living for the day only, and for the day’s work, life in day-tight compartment.’

‘As to your method of work, I have a single bit of advice, which I give with the earnest conviction of its paramount influence in any success which may have attended my efforts in life – Take no thought for the morrow. Live neither in the past nor in the future, but let each day’s work absorb your entire energies, and satisfy your widest ambition . . .’

‘Throw away . . all ambition beyond that of doing the day’s work well. The travelers on the road to success live in the present, heedless of taking thought for the morrow, having been able at some time, and in some form or other, to receive into their heart of hearts this maxim of the Sage of Chelsea (Thomas Carlyle): Your business is “not to see what lies dimly at a distance, but to do what lies clearly at hand.” . . . The quiet life in day-tight compartments will help you to bear your own and others’ burdens with a light heart . . .’

. . . in moments of despondency, comfort may be derived from a knowledge that some of the best work of the profession has come from (those) whose clinical field was limited but well-tilled. The important thing is to make the lesson of each case tell on your education. The value of experience is not in seeing much, but in seeing wisely.’

2. Finding a Calling: Being True to Certain Ideals

‘The Art of Detachment, the Virtue of Method, and the Quality of Thoroughness may make you students, in the true sense of the
word, successful practitioners, or even great investigators; but your characters may still lack that which can alone give permanence to powers – the Grace of Humility.’

‘Practically there should be for each of you a busy, useful, and happy life; more you cannot expect; a greater blessing the world cannot bestow. Busy you will certainly be, as the demand is great. . . Useful your lives must be, as you will care for those who cannot care for themselves. . . And happy lives shall be yours, because busy and useful; having been initiated into the great secret – that happiness lies in the absorption in some vocation which satisfies the soul; that we are here to add what we can to, not to get what we can from, life.’

Especially during his Oxford period, Osler spent much of his time collecting books with the aim of giving them to libraries either then or through his will. When he charged patients for consultations, he spoke of ‘sanctifying the fee’ through book purchases.

3. Find Mentors: The Young Person’s Friend

As a protégé of the older James Bovell, a Toronto physician, Osler said, ‘Dr. Bovell gave me a bedroom in the house...Having catholic and extravagant tastes he had filled the room with a choice and varied collection of books...and that winter gave me a good first-hand acquaintance with the original works of many of the great masters.’

When the Johns Hopkins University School of Medicine opened, requiring women to be admitted on an equal footing, Osler said, ‘...That she has not yet arisen is no reflection on the small band of women physicians who have joined our ranks in the last fifty years. Stars of the first magnitude are rare, but that such a one will arise among women physicians I have not the slightest doubt.’

On his 70th birthday he said, ‘To have had the benediction of friendship follow me like a shadow . . . fill(s) the heart with gratitude...and any success I may have attained must be attributed in large part to the unceasing kindness of colleagues and to a long series of devoted pupils whose success in life is my special pride.’

4. Be Positive: Prince of Friends and Benefactors

‘To each one of you the practice of medicine will be very much as you make it – to one a worry, a care, a perpetual annoyance; to another, a daily joy and a life of as much happiness and usefulness as can well fall to the lot of man’

‘...The atmosphere is darkened by the murmuring and whimperings of men and women over the non-essentials, the trifles that are inevitably incident to the hurly burly of the day’s routine...learn to accept in silence the minor aggravations...and consume your own smoke with an extra draught of hard work...’
After the death of his son, Revere, he wrote: ‘Grief is a hard companion, particularly to an optimist, and to one who has been a stranger to it for so many years. We decided to keep the flag flying and let no outward action demonstrate, if possible, the aching hearts.’

5. Learn and Teach: Driving Plato’s Horses

‘To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all.’

Osler considered observation plus knowledge as the keys to the art of medicine. From this view followed a straightforward philosophy of teaching:

‘Teach the student how to observe, give him plenty of facts to observe and the lessons will come out of the facts themselves. . . (Indeed), The whole art of medicine is in observation, as the motto goes, but to educate the eye to see, the ear to hear and the finger to feel takes time, and to make a beginning, to start a man on the right path, is all that we can do. We expect too much of the student and we try to teach him too much. Give him good methods and a proper point

6. Care Carefully: The Least Sentimental and the Most Helpful

‘In some of us the ceaseless panorama of suffering tends to dull that fine edge of sympathy with which we started . . . Against this benumbing influence, we physicians and nurses, the immediate agents of the Trust, have but one enduring corrective – the practice towards patients of the Golden Rule of Humanity as announced by Confucius (6th century BC Chinese philosopher): “What you do not like when done to yourself, do not do to others.”

‘By far the most dangerous foe we have to fight is apathy – indifference from whatever cause, not from lack of knowledge, but from carelessness, from absorption in other pursuits, from a contempt bred of self-satisfaction.’

7. Communicate: Secrets of the Heart

‘Beware of words – they are dangerous things. They change color like the chameleon, and they return like a boomerang. . . In your relation with the profession and with the

1 Plato paints the picture of a Charioteer driving a chariot pulled by two horses. The Charioteer represents intellect, reason, or the part of the soul that must guide the soul to truth, and it has to control one horse which represents rational or moral impulse or the

positive part of passionate nature (e.g., righteous indignation); while the other horse represents the soul’s irrational passions, appetites, or concupiscent nature. The Charioteer directs the entire chariot/soul, trying
public, in everything that pertains to medicine, consider the virtues of taciturnity. Look out. Speak only when you have something to say. Commit yourself only when you can and must. And when you speak, assert only that which you know.'

‘If you cannot say anything good about a man, say nothing.’

‘Avoid carrying unpublished knowledge to the grave.’ (However, he urged quality above quantity.) ‘The young physician should be careful about what and how he writes. . . The difficulty is that the young write too much, the mature write too little. There is much green fruit sent to the market, and the fruit of too many of the fine trees is never plucked at all.’

‘Listen to the patient, he is telling you the diagnosis’ was a phrase Osler used often.

8. Seek Balance: A Simple and Temperate Life

‘The young doctor should look about early for an avocation, a pastime, that will take him away from patients, pills, and potions . . . no man is really happy or safe without one, and it makes precious little difference what the outside interest may be – botany, beetles or butterflies, roses, tulips, or irises, fishing, mountaineering or antiquities – anything will do so long as he straddles a hobby and rides it hard.’

‘There is no such relaxation for a weary mind as that which is to be had from a good story, a good play or a good essay. It is to the mind what sea breezes and the sunshine of the country are to the body – a change of scene, a refreshment and a solace.’

‘Fifteen or twenty minutes day by day will give you fellowship with the great minds of the race, and little by little as the years pass you extend your friendship with the immortal dead. They will give you faith in your own day.’

9. Epilogue

‘I have had three personal ideals. One, to do the day's work well and not to bother about tomorrow. It has been urged that this is not a satisfactory ideal. It is; and there is not one which the student can carry with him into practice with greater effect. To it, more than anything else, I owe whatever success I have had – to this power of settling down to the day's work and trying to do it well to the best of one’s ability, and letting the future take care of itself.’

‘The second ideal has been to act the Golden Rule, as far as in me lay, towards my professional brethren and towards the patients committed to my care. And the third has been to cultivate such a measure of aequanimitas as would enable me to bear success with humility, the affection of my friends without pride and to be ready when the day of sorrow and grief came to meet it with the courage befitting a man.’
Osler requested that his epitaph should read: 'Here lies the man who admitted students to the wards.'

References


MEDICAL JEOPARDY: The 11 Questions (really the answers!) are:

1. Osler was one of four professors whose names are associated with the founding of the Johns Hopkins. The other three were:
   i. Halsted (of radical mastectomy fame, and also famous for his cocaine addiction)
   ii. Kelly (of Kelly’s forceps)
   iii. The pathologist Welch (Clostridium welchii).

2. Osler wrote the first significant and scientific textbook of medicine. The Principles and Practices of Medicine, was published in 1892, was exceptionally popular and, to this day, you cannot read better clinical descriptions of endocarditis or typhoid fever.

3. Osler was famous for being an optimist and a prankster. Under the pseudonym of Egerton Yorrick Davis, he wrote several letters to the editors of medical journals describing various (completely fictional) clinical entities, including penis captivus.

4. Osler was a remarkably efficient man, someone you could set your clock by. He made excellent use of his time.

5. Some of Osler’s speeches were expanded and printed as little booklets. Most famous among them is Aequanimitas (“equanimity”) or the virtuous attitude of calmly accepting what comes one’s way. His A Way of Life is another such masterpiece.

6. Several signs are named after him:
   i. Osler’s sign is an artificially high blood pressure reading due to atherosclerotic arteries.
   ii. Osler’s nodes: painful bumps in infectious endocarditis.
   iii. Rendu-Osler-Weber disease, also known as hereditary hemorrhagic telangiectasia.
   iv. Osler-Vaquez disease is what we now call Polycythemia rubra vera.
7. The neurosurgeon Harvey Cushing (1869-1939) wrote the definitive biography of Osler, *The Life of Sir William Osler* in two volumes that won the Pulitzer Prize in 1926. Cushing’s name lives on with Cushing’s Syndrome I (excess of cortisol; there are also Cushing’s syndromes II and III which are rare neurological syndromes); Cushing’s triad (signs of raised intracranial pressure are hypertension, bradycardia, irregular respiration); Cushing’s ulcer (gastric ulcer in head injury patients) and Cushing’s Law (increased ICP causes cerebral ischemia), to name a few.

8. Osler spent his last years as the Regius Professor of Medicine at Oxford.

9. His only son, Revere, died in World War I. Osler wrote in his diary when he heard the news:

”The War Office telephoned at 9 in the evening that he was dead. A sweeter laddie never lived, with a gentle and loving nature. We are heartbroken, but thankful to have the precious memory of his loving life . . . fates do not allow the good fortune that has followed me to go with him to the grave – *call no man happy until he dies.*”

10. He died of *H. influenzae* empyema complicating a long bronchitis and pneumonia.

11. He had almost single-handedly taken the teaching of medicine out of the classroom and to the bedside. He wanted his epitaph to read, *“He taught medical students at the bedside.”*²

² If you are wondering why this epitaph is different from the one mentioned earlier, it appears he spoke of it several times. Here is yet another version:

‘*I desire no other epitaph – no hurry about it, I may say – than the statement that I taught medical students in the wards, as I regard this as by far the most useful and important work I have been called upon to do.*’
PRESENTING AND RECORDING THE H & P

By Abraham Verghese, MD

I am using a hypothetical student’s written H&P and I have appended comments and notes to it. Some of my comments apply to things that might be important when presenting this H&P on Professors Rounds, for example.

I would suggest you practice presenting your H&P without notes, practice at home, practice while you drive. How you are perceived (for better or worse) often has a lot to do with the quality and organization of your presentation, and with how you present yourself. These tips are meant to help you so that you don’t hide your light under a bushel, and so that you get the credit you deserve for being hard-working and faithful. A presentation that is perceived as sloppy and poorly considered has the opposite effect.

When you present, your responsibility is to make the patient (who is not there) come alive before your listeners and hopefully lead them, by your story, down the correct path to a differential or a diagnosis.

It is an art, and like anything else, practice makes perfect. Watch your residents and emulate the ones who do it well.

Date: 1/2/08

CC: Chest pain of four months duration

My bias is that a chief complaint should have three things in it: 1) The Complaint, 2) the Duration, and 3) a Pause (to allow your listener to sift through his or her mind files for the right page). If you tell me ‘Chest pain of one hour’s duration,’ certain things go through my head as a listener, and they are quite different from if you say chest pain of two years’ duration.

HPI:

The pt is a 62 YOWM c a h/o HTN, DM2, & ↑ chol who was in his usual state of health until four months PTA when he developed the insidious onset of chest pain.

This is the best and the hardest-working sentence in the English language and you can’t go wrong if you use it for every HPI.
I love this sentence because it does several things:

1. The words ‘Usual’ SOH allows you to begin the story when you want to, rather than when he was last normal, for which you may have to go way back in some patients.

2. ‘PRIOR TO ADMISSION or PTA’ in my opinion is the only time frame you should use, so that your listener does not have to search for a Gregorian calendar to figure out when things happened.

3. “Insidious” (or acute, or gradual) – the pace of onset (or the anamnesis) is critical. Sudden onset of a neurologic deficit for example is almost always vascular. A gradual onset of same neuro deficit could be a mass lesion, a demyelinating lesion, but it is probably not vascular.

The chest pain he describes the pain as a dull aching or heaviness in the center of his chest.

As soon as you identify the first sx, tell your listener everything about it before moving on to the next thing that happened because the listener’s mind is still stuck waiting for more about the first sx. The student does a good job here of expanding on that first symptom.

“Maybe it’s a little like indigestion.” He denies any radiation of the pain or associated SOB, diaphoresis, palpitations, N/V, or dizziness. It typically lasts 10 minutes. Initially, he developed CP once every other week c relatively heavy exertion (e.g. walking briskly for more than 15 minutes). It has slowly ↑ed in frequency to a few times a week during the last month c less activity (e.g. normal-paced walking for more than five minutes). The CP is rated as ~4/10. Rest seems to improve it. He’s tried antacids & Pepcid AC & initially thought they helped but isn’t sure now. Lying flat doesn’t seem to bring on the CP.
This is good. A top student might explore if the sx come on with sexual intercourse, or when the patient is angry or excited, and whether the pain came on when walking on level ground, or uphill, or into a cold wind.

One day PTA the pt developed the same pain at rest while watching TV after dinner.

Notice, not ‘9:00PM’ or ‘last night’ but ‘one day PTA’.

It began as a 2/10, increased to 6/10 over five minutes then waxed & waned s completely resolving for 25 minutes. He reports mild SOB during this episode but no other associated sx. Three hours prior to admission, after breakfast he had an essentially identical episode. He told his wife about the CP one hour PTA; she called the pt’s PMD who instructed them to come to SUH.

The student clerk has done a good job of taking us from the start of the story to the end which is always the Day of Admission, DOA. I actually find it helpful when seeing a complex patient, and taking a history, to draw a line from first sx to DOA, and list the development of every new sx along that line. Each time you mention a new sx, be sure to tell us everything about that before going on. It is frustrating to the listener to hear, ‘the patient then developed cough and sputum production and then had leg swelling’ – each one of those next sx needs to be explored.

Now a common student mistake at this point is to assume that since they have conveyed the story from the first sx to the DOA, they are done. YOU ARE NOT DONE YET. Remember, your listeners are engaging in iterative hypothesis testing and are thinking of the diagnostic imperative – what is it that is diagnosable and treatable that they can’t afford to miss? So they are waiting with bated breath for more HPI . . .
Currently the pt denies CP or SOB. He has had very mild DOE for at least 10 yrs, which he attributes to smoking that hasn’t recently changed. He has heartburn & “indigestion” (abdominal fullness and bloating) 1-2x per week but now is uncertain if they’re related to the CP. He denies syncope, PND, orthopnea, PND, edema, palpitations, cough, sputum production, wheeze, pleuritic CP, ABD pain, regurgitation of food, bitter taste in mouth, or trauma to or tenderness of the chest wall.

This is good. What the student has done is essentially given us the ROS of the cardio respiratory system, without calling it the ROS. It belongs here, and you are telling your listener, ‘I’m no fool, I won’t wait till the ROS to tell you about the syncope.’

He reports being very anxious lately about the CP but has not had distinct episodes of panic related to the CP.

Attendings will vary on this (so check with yours), but my bias is that in the HPI you must give us the pertinent PMH, SH, FH without calling it that. If he has chest pain, then I don’t want to wait for the Past History to know that he had a stress test a month ago; I don’t want to wait for the social hx to learn he smokes. These are very pertinent to the HPI and his complaint of chest pain. Again, don’t call it past history or social history when you bring it into the HPI but instead segue to it perhaps using the word ‘Significantly’. You are indicating to your listeners that you are anticipating their differential, and won’t tease them by leaving things out of the HPI because you think they belong in the family history or elsewhere.

Significantly, the patient has had HTN diagnosed ~20 yrs PTA, but pt not sure of the level of control but does report frequent medication changes in the past; reports good compliance c medications. A year ago he had a stress test for chest discomfort that he sustained while on vacation. He was told the EKG and stress test was normal. He has been a diabetic for 5 yrs PTA, last documented HbA1c 9.1% 6 months
ago. The patient smokes tobacco: 1 PPD for 45 yrs. He’s tried to quit several times but has not been successful. His father died of CAD @ 71; his 1st MI was at ~age 50. Brother alive c a h/o MI & CABG at 60

In short, a good HPI, takes us from the start of the story to the end (DOA), working chronologically, exploding each sx as it developed, and then a good HPI always includes the ROS of the relevant system (without calling it a ROS) and also includes PH, FH, SH that is relevant to this admission (without calling it any of those things). It also includes + and – sx that anticipate the listener or reader’s differential.

At the end of your HPI, your attending or listener should be able to turn to you and say, ‘is there anything else pertinent to his admission in the FH, PMH, SH, ROS and you should be able to say ‘No’. If your answer is is ‘Yes,’ then whatever it is probably belongs in the HPI.

**PMH:**

1. **DM** as mentioned above accu check at home “160-180” fasting (only does them “1-2x per week”); frequent dietary noncompliance; sees an ophthalmologist yearly; denies h/o retinopathy, neuropathy, or nephropathy; he hasn’t been to his PMD for six months

2. **HTN** as mentioned in HPI

3. ↑ Chol - last lipid profile 6 months ago tot. 220, LDL 114, HDL 45, TG 240; LFTs at the same time WNL

4. **Glaucoma**

5. **Obesity** - pt reports having been overweight his entire life, he is relatively inactive

6. **Gout** - multiple prior attacks in both great toes but none since starting allopurinol ~5 yrs ago

7. **DJD** - mostly in knees
8. Anxiety: The pt reports being anxious most of his life, this became particularly problematic after he retired; medication has been helpful.

9. S/P CCK-1996, s complications

10. S/P appy in the early 1950s

   Meds:
   - Lisinopril 80mg once daily
   - HCTZ 25mg once daily
   - Amlodipine 10mg once daily
   - Metformin 1000mg twice daily
   - Simvastatin 20mg once daily
   - Allergies:
   - Sulfa Hives
   - Famotidine 10mg PRN
   - Timoptic 0.5% 1 drop, both eyes twice daily
   - Allopurinol 300mg once daily
   - Paroxetine 100mg once daily
   - Rofecoxib 25mg once daily

SHx:

Tobacco mentioned earlier. Pt lives with his wife of 42 yrs in University City. He has a 40 y/o son & a 37 y/o daughter; both live in the St. Louis area. He retired from his job as a mechanical engineer at McDonald Douglas 2 yrs ago.

ETOH:

~2-4 alcohol-containing beverages per week.

Illicit drug use:

Never.

FHx:

Father and brother mentioned above. Mother alive @ 85 c HTN, DM2, Alzheimer’s disease, CAD; lives in a nursing home.
ROS:

Constitutional-no weakness or malaise

HEENT:

No new visual sx, wears glasses, mild nasal congestion in the spring the pt attributes to “allergies”

Pulm:

See HPI

CV:

See HPI, no claudication

GI:

See HPI, no diarrhea, constipation, melena, BRBPR, hematochezia

GU:

No dysuria, hematuria, urgency, hesitancy, or frequency

Musculoskeletal:

Knees hurt c prolonged walking, mild occasional LBP

Skin:

No rashes, no foot ulcers

CNS:

No HA, focal motor or sensory changes

Psych:

No recent depression

PE:
GENERAL:

Moderately obese WM, lying in bed, looks nervous, appears stated age

VS:

BP LUE 149/92, RUE 145/90; HR 88; RR 18; T 36.7°C;

Wt.

225#; Ht. 5’10”; BMI 32.3

HEENT:

NC/AT, EOMI, PERRLA, nasal & pharyngeal mucosa pink & moist, TMs pearly gray c normal landmarks

NECK:

No LAD, TM, bruits; JVP @ 6cm

LUNGS:

Version 1: breath sounds somewhat distant, no rales, wheezes, or rhonchi

Version 1 is the sort of thing that you will see in most H&Ps and yet if the patient’s sx point to the lungs or the heart, I think you will impress your reader/attendings if you hone in here and give more detail. So even though what follows below is a normal lung exam, it just sounds better than the cryptic line above, and it sounds like you know what you are talking about.

LUNGS:

Version 2: Both sides of the chest moved equally on inspection, and there was no bruising or retractions. The trachea was central and there was no chest wall tenderness. Percussion revealed the right side to be clear with the upper
border of liver dullness in the 5th, 7th, and 9th intercostals spaces in the mid clavicular, mid axillary and midscapular lines. The left side was clear to percussion and cardiac dullness was outlined and the gastric bubble was identified. Tidal percussion was demonstrated on both sides. Tactile fremitus was equal on both sides. On auscultation, normal vesicular breath sounds were heard in all lung fields. There were no adventitious sounds and vocal fremitus was equal on both sides.

CV:

(Version 1 of reporting a normal exam)

RRR, normal S1 & S2, S4 heard; no S3 or murmur, PMI in the 5th intercostals space @ the MCL; no chest wall tenderness; pulses 2+ throughout

(Since this is where the money is in terms of your patients sx, your listener will be waiting with baited breath for what you say in the cardiac exam. Even if it was all ‘normal’ you should learn to say normal in a smart, informed way that suggests you know what normal is and you know how to hone in when you need to. Compare version 2 with version 1)

(Version 2 of normal CV exam)

The pulse was 80 per minute and regular in rate and rhythm with no collapsing quality and the vessel wall was not palpable (Osler maneuvers). The BP in the right arm was 130/60 and in the left 130/70 with the patient standing and then 120/70 in the right arm with the patient lying down. -- There was no radio-femoral delay. All pulses were felt. The carotid upstroke was normal. The precordium was quiet without a bulge or parasternal lift.

The PMI was felt in the 5th space just outside the MCL and it occupied an area larger than a dime. It was ‘heaving’ in nature (suggesting a ventricle doing volume work). There was no parasternal heave, no thrills, and P2 and A2 were not
palpable. Percussion mentioned above. Auscultation in the mitral area revealed a normal S1 and S2 with systolic interval and diastolic intervals free and with no added sounds or rubs. In the tricuspid area, similar findings were noted. In the pulmonary area, S2 was normally split. But no murmurs or clicks were heard. In the aortic area, A2 was accentuated; but no murmurs or added sounds were heard.

GI:

Protuberant, NABS, NTND, no HSM, brown stool guaiac negative

GU:

Male external genitalia without lesions, masses, or discharge; prostate smooth, nontender, & not enlarged

LYMPHATIC:

No cervical, axillary, or inguinal LA, no edema

SKIN:

Warm & dry, no lesions, no foot ulcers

MUSCULOSKELETAL:

Full ROM of all joints, no bony tenderness

2+ 2+ CNS:

A & Ox3; anxious affect; speech clear & fluent, appropriate use of language; good comprehension; CN II: VA 20/40 OU with glasses; visual fields full; CNIII/IV/VI: EOMI, PERRLA; CN V: intact symmetric facial sensation to LT; CN VII: face symmetric with smile; CN IX/X: palate elevates midline; CN XII: tongue protrudes midline; sensation intact to LT & PP throughout; intact sensation to monofilament testing on bottoms of feet, motor strength 5/5 throughout, gait stable; Romberg’s sign not present; intact FNF ability; fundoscopic exam s: papilledema, hemorrhages, or exudates, A-V nicking present
Labs:

- **AST 19 AlkPhos 95 Ca 9.3 Troponin-I <0.1**
- **ALT 22 Tbili 1.0 Alb 4.2**
- **UA-neg WBC, neg nitrite, trace protein, pH 6.0, neg blood,**
- **SPGR 1.015, neg ketone, 1+ glucose**
- **CXR-no bony abnormalities; heart size normal; no**
  - consolidation, congestion, or effusions
- **ECG-NSR @ 90, PR 0.16, QRS 0.09, QTc 0.40, QRS morphology**
  - normal, no pathologic Q waves, nonspecific ST flattening
- **in V5-V6 & in I & AVL, no prior ECG for comparison**

Assessment & Plan:

62 YOWM with DM2, HTN, ↑ chol, & smoking presents with escalating CP.

The assessment and plan required of you will vary by site and attending. What is below I think is the minimum and you could go into more detail.

1. **CP** - The most likely causes of CP inc' cardiac, pulmonary, GI, musculoskeletal, & Ψ. The pt’s CP is very characteristic of angina (substernal, aching/heaviness, brought on by exertion, & relieved by rest). Given this & the pt’s multiple CV risk factors (age, FMHx, HTN, DM, tobacco), the most likely & concerning Dx is cardiac ischemia. The pattern of escalation, particularly in the last 24 hours, suggests unstable angina. MI seems less likely given neg. troponin-I >12 hours p first prolonged (total duration ~30 minutes) episode of CP yesterday. However, a non-ST-elevation MI related to the more recent episode of CP is still possible. While the pt’s ECG findings (i.e. ST flattening in V5, V6, I, & AVL) are nonspecific, they potentially suggest ischemia in the LAD/circumflex territory. The pt does have a h/o heartburn & indigestion but his CP is so c/w angina that a GI cause seems much less likely. Doubt anxiety/ somatization as a primary etiology, though it may be playing a minor role. Given the lack of other sx, pulmonary & musculoskeletal causes are extremely unlikely. Will plan to begin ASA, nitropaste, and β-blocker. Has not had CP x ~6 hours so will not initiate IV nitro or enoxaparin.
Follow serial troponin-Is. Repeat ECG in AM. Telemetry monitor. Assuming troponin-Is are negative & the pt doesn’t redevelop CP, a stress test could be done. Given a high pretest probability, a cardiac cath would also be reasonable. Should he redevelop CP, would begin IV nitro & enoxaparin. If recurrent CP is prolonged consider urgent cath.

2. DM2 - the pt’s DM is relatively uncontrolled, most recent HbA1c 9.1% (goal <7%). He will need more intensive Rx after discharge, additional oral agent(s) or insulin. Dietary noncompliance, obesity, & lack of activity all contributing to poor control. For the short-term, will hold metformin (because of the possibility of a cardiac cath/IV contrast), control glucose c SSI, ADA diet. Dietician consult a D/C.

3. HTN - at present BP needs better control (goal <130/80) & the addition of β-blocker will be helpful. Cont’ ACE-I.

4. ↑Chol - when last checked LDL was above goal (<100), recheck now and adjust simvastatin PRN. Dietician consult a D/C

5. Obesity - a long term goal for this pt will be wt. reduction, which will probably improve his DM, HTN, ↑chol, and knee pain. Dietician consult a D/C.

6. Tobacco abuse - clearly need to strongly encourage smoking cessation! @ D/C consider nicotine patches or bupropion.

7. Gout/DJD - cont’ allopurinol and rofecoxib.

8. Anxiety D/O - cont’ paroxetine.

John J. Jones Jr., WUMS III

424-1234

I would like to thank Dr. Arlina Aluwhalia for this H&P, which I used a template for my comments. You will find many takes on what constitutes a good H&P and a good presentation. Most of them will have certain things in common. Below you will find another approach by Christophe Gimmler.
THE STRUCTURE & PRINCIPLES BEHIND THE MEDICAL H&P

A.K.A.

“HOW TO LOOK GOOD BY BEING GOOD”

by Christophe Gimmler

INTRODUCTION

What follows is a proposed structure to follow when formulating your H&Ps on internal medicine rotations: this format includes sequential sections as well as a guiding set of important principles for organizing your note. Like scales on an instrument or strokes in swimming, these forms are internalized and become both easy and automatic with time and practice.

They are designed to support a way of organizing thought which powerfully distills a large amount of information into a clear conclusion leading seamlessly to effective diagnostic and therapeutic interventions.

They also support your role presenting the H&P as a quarterback or conductor, leading your audience or team clearly and methodically through a story to your reasoned conclusion. This is done transparently so colleagues may appropriately question and fine-tune your thinking.

**ID/CC (Identification/Chief Complaint)**

**Principle:**
Set the stage using a framework within which the audience can organize subsequent information:

- Age
- Gender
- +/- ethnicity
- centrally relevant PMH
- chief complaint (either in the patient’s own words or in your short summary phrase)

**Rationale:**

*It is critically important that the audience know what the underlying issue is so they can filter your presentation through the relevant differential diagnoses.*
Example:

Mr. P. is a 65 year-old man with hypertension, type 2 diabetes, and 40-pack years smoking who presents with exertional chest pain.

Comment:

The relevant issues and questions for chest pain are very different comparing a 65 year-old with hypertension, diabetes, and tobacco use with a 20 yo without significant PMH reporting chest pain during basketball.

**HPI (History of Present Illness):**

Example:

The patient was in his usual state of health until three months prior to admission (PTA) when he noted the onset on dark tarry stools one to three times per day. Six weeks PTA, he developed intermittent and progressively severe 4-6/10 upper abdominal pain, worse with food intake, occasionally associated with vomiting, lasting two to four hours, and not associated with hemoptysis, dysphagia, or odynophagia. He denies any tenesmus, constipation, or change in stool caliber.

One week ago, the patient noted one isolated episode of vomiting with some dark blood, no coughing or SOB, and has since developed dizziness after standing rapidly without palpitations, chest pain, or frank syncope.

Finally, the patient has noted an approximately 5 lb weight loss over the last several months, and equivocally states he “might be avoiding food because of my belly pain.” Of note, the patient has been taking over-the-counter pain pills for chronic lower back pain for approximately eight months: he is unsure of how many pills he has taken per day and is unwilling to estimate.

**Principle 1:**

Report the history in chronological order, starting when you feel the central problem began through to the time of presentation to the hospital.

**Rationale:**

*Each stage in the history informs subsequent events*

**Comment:**

In the above example, if this patient’s chief complaint was “dizziness,” the fact that the dizziness with standing developed after weeks of gastrointestinal bleeding makes orthostatic presyncope (from blood loss) most likely, while making cardiac ischemic or arrhythmic causes of his presyncope much less likely.
Principle 2:
Identify the pertinent positives and pertinent negatives.

Rationale:
Each symptom presented incurs a set of related symptoms supporting or refuting alternative items on that symptom’s differential diagnosis. The pertinent positives support your diagnosis while the pertinent negatives decrease the likelihood or preclude altogether other items on the differential diagnosis.

Comment:
In the above example, dark tarry stools (melena) trigger reporting the pertinent positives – upper abdominal pain and nausea – indicating a likely upper GI source, as well as the pertinent negatives – tenesmus, constipation, change in stool caliber – indicating that a lower GI source is unlikely.

Principle 3:
You are the historian and it is your job to filter information and discriminate relevance.

Rationale:
It is critical to move from a role of simply relaying information to filtering it into a meaningful context for your audience. If there are symptoms that are unimportant, you delete or de-emphasize them. If details are important, you focus on them, even if the patient does not.

Comment:
The above patient may not even be aware that he’s avoiding food because of stomach discomfort (from presumed NSAID-induced ulcer): but if you, as historian, report focused questions about this, it will help clarify the story and lower the likelihood that his weight loss is from intestinal ischemia or cancer or another more worrisome diagnosis. Alternatively, if this patient anxiously reports pain behind his eyes when he urinates, this can be excluded from your presentation as it does not have any patho-physiological significance… i.e. it makes no sense!

Principle 4:
State explicitly what you don’t know.
Rationale:
When there are important questions that the patient cannot answer, or important historical data that cannot be found in the record, it's important to explain this clearly so your audience knows it has been addressed and investigated.

Comment:
In the above example, explicitly stating that the quantity of over-the-counter pills (likely gastro-toxic NSAID's like Ibuprofen) is unclear points to the importance of this piece of information.

Principle 5:
Move your focus from broad to narrow: from symptoms to syndrome to etiology.

Rationale:
The information presented should be structured to support a movement from a set of temporally related symptoms, to a syndromic diagnosis, to a disease/etiologic diagnosis. These conclusions are not stated explicitly, but rather supported by the data presented.

Comment:
In the above example, this movement is implied as follows:

Symptom → Syndrome → Disease/Etiology

Melena + abdominal pain, N/V → Upper GI Bleed + chronic pain pills → Peptic Ulcer

(As opposed to a different example)

Melena + hemoptysis → Upper GI Bleed + chronic heavy alcohol, jaundice → Esophageal Varices
PMH (Past Medical History)

**Principle 1:**
Order items by importance and relevance to chief complaint/HPI.

**Principle 2:**
Group items by patho-physiological association.

**Rationale:**
This logically organizes a patient’s diagnoses into groups that are interrelated, hence providing additional information. (It also teaches you to look for connections and patterns of disease).

**Example:**
The chronic renal insufficiency, peripheral neuropathy, and retinopathy resulting from diabetes mellitus should be presented together (both verbally and in written form).

**Principle 3:**
Provide detail in direct proportion to the relevance of the item to the chief complaint/HPI.

**Rationale:**
You want to provide only what’s necessary without overloading the audience.

**Example:**
The Pulmonary Function Tests and ABG of a patient with COPD are relevant if she is presenting with dyspnea, not if she is presenting with a right lower extremity cellulitis.

**Principle 4:**
State chronic disease “markers”- both clinical and laboratory- when relevant.

**Rationale:**
There is an incredibly broad spectrum of disease possible under any one diagnosis. These markers help to place a patient on this spectrum.

**Example:**
A COPD patient with occasional morning productive cough, who can walk 4 miles at a moderate pace and has an FEV1 of 2.0 L is very different than one who is on
home oxygen therapy, has been intubated 3 times over the past year, and has an FEV1 of 0.8 L.

**Allergies**

**Principle:**
State drug AND allergic reaction or adverse reaction symptoms.

**Rationale:**
*It is important to distinguish between the array of allergic reaction symptoms from rash to anaphylactic shock, and common adverse reactions which are foreseeable and potentially preventable.*

**Example:**
A true anaphylactic reaction to morphine precludes use of this agent while constipation or nausea from the drug is readily treatable.

**Medications**

**Principle 1:**
Order drugs by importance and relevance to chief complaint/HPI.

**Rationale:**
*Drugs can be relevant either because of their therapeutic import or issues of adverse reactions.*

**Comment:**
Include over-the-counter (OTC) and herbal drugs as well.

**Principle 2:**
Group drugs by association.

**Rationale:**
This practice helps to identify both “regimens” for diseases and important omissions.

Example:

Most patients with coronary artery disease status-post myocardial infarction should be on aspirin, statin, ace inhibitor, and beta blockade therapy. If you present these meds together, you will notice when a patient is potentially being sub-optimally treated.

Principle 3:
State generic names of drugs.

Rationale:
You are not advertising for pharmaceutical companies and it is important to know what specific agents are in each medication.

Example:
Each year, many patients are overdosed on acetaminophen because health care practitioners forget that Tylenol and Vicodin both contain this agent.

Principle 4:
Report compliance with medications.

Rationale:
Understanding what agents the patient might be occasionally skipping or omitting altogether is key.

Example:
For a patient presenting with hypertensive crisis, knowing that he is not actually taking his three prescribed outpatient anti-hypertensives will help you avoid over-prescribing him 4 agents on admission.
Social History

**Principle:**

Include *where and with whom* the patients lives and from whom he gets care (in order to direct post-discharge care options), as well as *occupational, travel, sexual, and drug history* (to determine potential exposures), with attention towards *relevance* to HPI.

Family History

**Principle:**

*Focus on potential familial/congenital risks* including: cancer, MI, stroke, DM, clotting disorders, including age of onset. Again, *relevance* to HPI is key.

ROS (Review of Systems)

**Principle:**

*Emphasize relevant positives and negatives, but anything directly associated with the chief complaint should be in the HPI.*

**Rationale:**

*Anything of central relevance to the chief complaint should not be fragmented off in a separate section.*

**Example:**

Weight loss should be in the HPI of a patient presenting with fatigue, but in the ROS of a patient presenting with acute exertional chest pain.

PE (Physical Exam)

**Principle 1:**

Establish a core set of items that you check on every patient.

**Rationale:**

*It is crucially important that you develop both a personal convention and establish an experiential knowledge of “normal” findings.*

**Example:**

For fundoscopic exams, lung auscultation, and prostate exams, you will not be
comfortable reporting what is abnormal until you know what is within the range of normal.

**Principle 2:***

There is no such thing as a full physical, so *tailor* your exam.

**Rationale:**

There is a vast number of potentially pertinent physical findings, both positive and negative, so add focused exam items flexibly based on the chief complaint/problem.

**Example:**

A patient presenting with a cellulitis without systemic complaints does not require a full neurological exam, while a patient complaining of acute fever and altered mental status needs a cranial nerve, motor, sensory, DTR, cerebellar, and gait exam documented along with a mental status exam.

**Principle 3:**

Never document or report an exam item which you didn’t perform yourself.

**Comment:** An exception for technical elements of the exam (i.e. anoscopy or laryngoscopy), the specific exam item can be reported with the examiner explicitly identified.

**Labs/Studies**

**Principle 1:**

While documenting all diagnostic findings, highlight labs that are relevant to the patient.

**Rationale:**

Different patients will pose varying diagnostic questions and, hence, demand emphasis on differing sets of laboratory studies.

**Example:**

For a renal failure patient, the BUN and Cr, serum electrolytes including Mag/Ca/Phos, as well as hematocrit and urinalysis would all be critically important. In contrast, for an acute chest pain patient, the cardiac enzymes, creatinine, potassium, and lipid panel along with serial EKG’s are of central relevance.
Principle 2:

Synthesize and summarize EKG, radiographic, and other diagnostic reports (like PFT's).

Rationale:

As with the HPI, it is your job to parse out notable findings and relevant normalities in order to synthesize the study in the context of the patient.

Example:

In a patient with syncope, the corrected QT segment of their EKG is important to report whereas, with a chronically dyspneic patient, this interval is much less relevant.

Comment:

Providing the dates of diagnostic tests as well as the source of the interpretation (i.e. medical student, radiology resident, radiology attending) is also important in assessing significance.

Impression

Principle:

Abstract or distill the key relevant features of the previous sections into a several sentence (or one long run-on sentence) summary of the patient presentation, adding a brief summary assessment.

Rationale:

This serves to re-focus the audience (who may have been distracted by pages) prior to the all-important assessment and plan.

Example: A 65 year-old man with PMH of diabetes, hypertension, 40 pack years of smoking, and methamphetamine abuse active at baseline now complaining of 30 minutes of acute severe exertional chest pain associated with dyspnea, presenting with elevated blood pressure to 220/110, unremarkable physical exam except for bilateral femoral bruits, dynamic antero-lateral T wave changes but normal cardiac enzymes, consistent with high risk unstable angina rule out myocardial infarction, secondary to unstable plaque versus amphetamine induced vasospasm.

Assessment and Plan

Principle 1:

Present by problem, prioritizing by acuity and severity, dividing each discussion into an Assessment section and a Plan section.
Principle 2:

Use the symptom as the problem if the syndrome is unclear, or the syndrome/disease as the problem if it is clearly established, in order to appropriately organize the discussion.

Rationale:

*If the etiology of the symptom is unclear, then by discussing the differential diagnosis for the symptom or symptom complex, you avoid jumping to an inappropriate diagnostic conclusion.*

Example:

If you discuss the problem as “unstable angina” rather than “chest pain”, you may miss considering dissecting aortic aneurysm or pericarditis as diagnostic possibilities for chest pain. Alternatively, if the patient has already had a coronary catheterization showing fresh plaque in the LAD without vasospasm or aneurysm, you can appropriately discuss the problem as unstable angina/MI.

Principle 3:

Assessment: Critically evaluate the relative likelihood of each item on the differential diagnosis.

Rationale:

*This should be a thorough ranked list of diagnostic possibilities, with evidence noted both in favor and against each item to support your ranking.*

Example:

Chest Pain:

Assessment:

Unstable angina (+ multiple cardiac risk fx, exertional pain, dynamic EKG depressions) (- enzymes, possible h/o amphetamines)

Vasospasm (+ amphetamine hx, + urinary toxicology screen)

(- exertional pain, no dynamic ST elevations)

Dissecting Aneurism (+ hypertensive on admission to 220/110, severe chest pain)

(- bilaterally symmetrical blood pressures and pulses)
**Pericarditis** (- no friction rub, no diffuse ST elevations, pain is exertional not pleuritic)

**Comment:**
This section is meant to meaningfully articulate the various potential diagnoses, elaborating key issues. It can be presented in outline form or in paragraph form – in either case, your reasoning is most important.

**Principle 4:**
**Plan:** Divide into the *diagnostic* plan and the *therapeutic* plan.

**Rationale:**
The *diagnostic plan* should logically follow your list of possible diagnoses and should be aimed at appropriately narrowing that list and efficiently arriving at a firm diagnosis. The *therapeutic plan* should also logically follow the list of potential conclusions.

**Example:**

*Chest Pain*

**Plan:**

**Diagnostic:** Will proceed with serial cardiac enzymes and EKG’s, and cardiac telemetry monitoring to assess for arrhythmia. Will consider cardiac catheterization in AM and possible trans-esophageal echo to rule out aortic root aneurysm. Additionally, we will check AM lipid panel, potassium, and creatinine.

**Therapeutic:** Will initiate ASA 325 mg QD, oxygen by NC if SaO2 below 95%; simvastatin 40 mg QHS, 60 mg LMW heparin SubQ BID, nitroglycerine drip for SBP < 140. Will hold beta-blockers given apparent methamphetamine intoxication and consider adding IIb/IIIa inhibitor if troponins rise at four or eight hours.

**Comment:**
Incorporate *contingency* plans in an “if X then Y” type format in order to anticipate important decision points (i.e. starting IIb/IIIa inhibitor if troponins rise). This will lead you to project further into the future in your planning process. Also, avoid delegating planning to consultative services as this begs the question of your own thought process.
OLD DOCTOR AS PATIENT

With apologies to Sir Archibald Doggerel, OSJ, OBE

In the ER against my will
the doctor there stood tall and still
Around his neck a stethoscope
which quickly gave me added hope
But it was just a decoration
Like a TV show sensation
What’s your name? Where do you hurt?
listened to my lungs right through my shirt
through the shirt, through the blouse
is he the only doctor in the house!?
Checked my liver with knuckle
didn’t know it’s my belt buckle
Off to X-ray for a scan
Then ABGs, is that a plan?
Why not have me just undress
check my heart, lungs, and the rest
ask me if my toes are numb?
I maybe old, but I’m not dumb
I’m a patient, show some caring
save me from my silent swearing
maybe it’s my own neurosis
but whatever happened to physical diagnosis?

– George Finlayson, MD

Dr. Finlayson (AQA, Western Reserve University, 1953) is retired from practice in Internal Medicine.
Professionalism and Mobile Devices: Guidance for the Clinical Setting

Students participating in the iPad clerkship pilot project, as well as all students who use any type of mobile device in the clinical setting, need to pay careful attention to professionalism and etiquette when using these devices. Please see the guidelines below. We’ve also included some sample phrases that you can use with patients, based on physician experiences with these devices.

1. **Comply with all patient privacy policies.** Use all devices in accordance with HIPAA policies. Use strong passwords, log off all applications, save nothing to your device, take no photos nor videos, and treat any device you use in clinics with special care.

2. **Different sites, different rules.** In addition to varying degrees of Internet access at sites, there will also be variance as to how mobile devices are (or are not) used in different clinical settings. Avoid making assumptions about what is acceptable; ask site staff or your resident to advise you.

3. **Explain to your patient why you are using a mobile device.** Tell the patient what you are looking at on your mobile device, and gain their cooperation (“I will be looking at your medical record while I’m talking with you; is that okay?”).

4. **Be aware of your line of sight with the patient.** Position your mobile device so that you are directly facing your patient.

5. **Let your patient know if you will need to break eye contact for any sustained period of time.** Give them a signal in advance that you will be averting your eyes (“Please hold on for one minute while I type”).

6. **Avoid using your mobile device to check your email or do unrelated web searches in the presence of patients.**

7. **Where appropriate, engage the patient with information on the device.** Examples would include patient education, showing a patient his/her lab values or showing a parent his/her child’s progress on a growth chart.

8. **If you are not using the device, close it.** This maximizes the time when the patient senses that they have your full attention. Close your iPad; put your smartphone in your pocket.

9. **Practice.** The ability to utilize a mobile device while maintaining patient-centeredness is an art. Practice with friends and/or family, and ask for their feedback. Discuss challenges with your colleagues, learn from them, and share what works for you.

Thanks to Dr. Clarence Braddock for sharing his own best practices in use of the iPad in the clinical setting.
Medical Student Perspective: Things I wish I had known before the start of my medicine clerkship  
Gene Ma

**Read the orientation manual!** – the manual provides a clear roadmap for the medicine rotation so there is no excuse for being surprised by any of the expectations during the rotation. Carefully reading and assimilating the tips in the H&P section of the manual will help you establish a solid foundation and can alleviate any anxiety you might have before you give your first presentation.

**Be a valuable part of the team** – as the medical students, we are blessed with far more free time than any other member of the team. Volunteer to look things up that the team might have questions about, integrate yourself, and take on an active role. Remember that the more you help your team, the more time they will have for teaching!

**Get feedback** – it goes without saying that you will have formal scheduled feedback sessions during the rotation; however, you can benefit tremendously from more frequent feedback. Whether you’ve just presented a full H&P, performed an abdominal exam, or read an EKG, if the timing is appropriate, ask how you could have done better. There is far too much to learn to not receive feedback on a daily basis.

**Be a self-directed learner** – your team will be more than happy to teach, but in order to derive the most benefit from their teaching, be familiar with things you can easily look up on your own before asking questions. By researching topics first, your team can focus on teaching the nuances of medicine that can only be learned through years of practice instead of teaching you facts that you could easily research on your own.

**Know your team’s patients** – You will be expected to be the expert on your patients but also try to become familiar with the other patients your team is taking care of as well. All patients are valuable learning opportunities and also opportunities for you to contribute to your team. During rounds, jot down notes about every patient and figure out ways you can assist in the care of the patients other than just your own.

**Make the most of call days** – call days are vitally important to your educational experience. Work hard to pick up as many patients as you are comfortable carrying, because those patients will be at the core of your learning for the next few days until your next call day.

**Own your assessments and plans** – although it may initially seem like a daunting task, you should try to develop your assessments and plans fully before going them over with your intern/resident. Work on it until you are confident enough to use your plan as the final plan for the patient. By being thoughtful and careful in the formation of your assessments and plans, you demonstrate to your team that you are truly invested in the care of your patients and are earnest about developing your clinical decision making skills.

The bottom line is that you only get as much out of this experience as you put into it. Immerse yourself in this rotation and you, your team, and your patients will reap the benefits!
THE TEN GOLDEN RULES OF YOUR MEDICINE CLERKSHIP

1) Be A Professional. Demand it of yourself. We will.
   - Be on time. Integrity always.
   - YOU are responsible for becoming the physician you want to be.

2) Be a team player.
   - Help your interns do their job; and they will help you learn.
   - If the team shines, you shine; the reverse hold true, too! Believe it.
   - No job is too small for a patient in need

3) Enthusiasm is nearly everything.
   - It is our responsibility to teach; it is not our job to make you care.
   - Your intern will work harder and sleep less than you. Be mindful of that.
   - Your best teacher will always be yourself.
   - Take the initiative: Anticipate what needs doing, and ask to do it.

4) Take advantage of the privilege of being a Medical student
   - You have the right go anywhere, see anything, ask anybody.
   - Watch an echo, an ERCP, a brain biopsy, a stent placement
   - Sit down with a radiologist, a pathologist, and ask to see what they see
   - Then bring it back to the team and teach us.

5) Prepare for a lifetime of learning
   - Develop an approach to learning; know how you learn best
   - Have an agenda – what are your goals?
   - Have a plan for accomplishing those goals.

6) Question Question Question!!! But question appropriately.
   - Learn how to ask good questions; it is the art of medicine.
   - Learn how to ask good questions; it is how you will most quickly.
   - Ask why, not what – “whats” can be looked up. Why metoprolol not what is metoprolol.
   - Don't hold up rounds to demonstrate knowledge; use it to acquire knowledge.
   - If you disagree with your resident, ask the attending, but AFTER rounds.

7) Read, then read more, the read even more.
   - Reading gives context and breadth; people are inaccurate.
   - Books first, review articles next, primary articles last.

8) Feedback Feedback Feedback
   - Don't be defensive: feedback is to help you; your evaluation happens once, at the end.
   - Seek it out. Don't let the month go by without it
   - Most things you will already know; its your job to listen for what you don’t know.
   - The best doctors grow as people, not just in knowledge.
   - Let your residents know how they are doing, but use tact.

9) Know THYSELF.
   - Ask yourself what your weaknesses are, and work on ‘em.
   - If you are confident, remember that everyone has much they can learn.
   - If you are quiet and shy, ensure your hard work goes noticed.

10) HAVE FUN. You’ve waiting years for this.
    - The Peace Corp has it right: It’ll be the toughest job you’ll ever love.

Phillip S. Pang
Ten Things in Epic That Everyone Should Know

1) **"Patient Summary" Tab**: located on top left of the patient's charge above chart summary. Here you can not only look up very useful tabs for specific data, but you can customize your favorite tabs by clicking on the monkey wrench on the far right. Some of my favorite tabs are listed below.

   - **Vitals**: best way to trend a temperature is to click on q8h then scroll down to the temp graph. You can hold your cursor over the points on the graph to get the exact temp and time.

   - **Order Hx**: Quickest way to get "sign out" on your patient overnight. If there's no new orders, chances are your patient was quite.

   - **Med**: Best way to see ACTIVE meds

   - **MedHx**: Best way to see all meds patient has seen during current hospitalization

   - **ABx**: One of my favorite tabs. Best way to see what Abx you patient has gotten and for how many days. Plus, temp curve and daily WBC is placed together. Keep in mind thought that not every ABx comes up here (there's just a few less commonly used ones that I've seen not posted here.)

   - **Pain**: This is the tab to use to see all pain meds you're patient has or is getting. Not too mention, the only way to see how much meds from a PCA patient is getting. Nurse's will calculate and is will show up here.

   - **Diabetes**: Great to trend all blood glucose levels and insulin/oral meds.

   - **Dialysis**: To follow I/O's of dialysis sessions

   - **I/O**: This isn't the best place to get I/O's since there's a better main tab below results review but here you can find out what lines the patient has, including NG tubes, etc.

2) **Epic Notes**: Using smart text really dose make life way easier if you spend a little time to learn it. You can customize your notes and add any lab to be automatically pulled into your note. Please see the end of this document for instructions.
3) **Chart Review** --> labs tab: Having trouble finding an old lab that was ordered or a lab that takes a week or more to come back? Go to "Chart Review", then click "labs", then click "filter". A list of all the labs will come up alphabetically!

4) **Note Saving**: You can save a note without signing it my clicking on "pend". Also, you can save it without signing it but still allow others to see it by clicking on "share." However, if you do sign it, you can still edit it (until it is cosigned) by highlighting your note and clicking on "addendum".

5) **The “Copy” button**: The copy button is located on any note that has been signed. Simply click this button and a new note that is a copy will appear ready for you to edit. Not to mention, all the Smart Text’s will already be updated. Please be sure to read your note very carefully if you are going to use this as to not have outdated information here. This feature is a good way of keeping your problem list updated, but make sure a fresh assessment is used each time.

6) **Note Formatting**: Be sure to make use of the tools you have to bold, underline and change the color of your text in your note to emphasize certain parts. This is very useful, especially if you’re writing a consult note so the primary team knows what’s most important from all your recommendations.

7) **Coping and Pasting from other programs**: You should know that you can copy and paste from most any other program (i.e. Excel or Adobe PDF). This also includes pictures if you really want to make your note look good. If for example you’re on Endocrine and want to make a nice table with the blood glucose values, you could type these into Excel then copy and paste it into your note. It will look very nice and organized!

8) **Quickly find that old order**: Go to patient summary (top left, or see description above), then click on “OrdHx” (again see description above on how to find this). Next, you’ll see, the date and two arrows on either side. Keep clicking on the arrow to the left until the date reflects the day the patient was admitted. Now, you’ll have a list of all the orders that have been placed since the patient’s admission. Next, simple click “Ctrl F” and the find function will appear and allow you to type in the order and find if and when it was ordered.

9) **Writing notes or placing order’s once a patient was discharged**: Click on “Patient Lists” at the very top of Epic. This will take you to your list of patient’s. On the left, scroll down until you see discharged patients and open this folder by clicking on the little + sign. Then click 24, 48 or 72 hrs depending on how long ago the pt was DC’ed home. Find you patient, listed alphabetically and open the chart and it will allow you to continue working on your notes and even
place order’s (for example, discharge medications).

10) **The Rounding Tab**: On the same “Patient Lists” just described above. You will have a list of your patients. By clicking on patient report, you can print both a rounding report (this will have all the important info such as meds, vitals and daily labs to present to Attendings) and an MD list which will print a list of patients for you to use and a “to do” list. This is also what’s used for signing out patients.

**Creating your own smartphases**

1) Open up Epic as you would normally

2) Go to “tools” (top tab) → “Smart Tool Editors” → “My Smart Phrases”

3) Click on “New”

4) Copy any one of the below labs from the first “@” to the last “@” and paste in the largest white screen

5) Under “SmartPhrase Name” place whatever name you like (I usually put my initials in front of all of them to keep them together, [e.g. EOUA])

6) Optional: Place a quick description of the lab in “Short Description”

7) Click accept and your done!

8) To use, type “.” then the first few letters of your Smartphrase name until you see your SmartPhrase and press enter

**Labs**

a) **CBC, Comp Met, Coags** (last 4 in past 72 hrs): This will display the last 4 values done is the past 72 hours
@LABRCNT(pt:4,inr:4,ptt:4,hepar:4)@

b) **Urinalysis** (last 4 in past 72 hrs):
c) **Urine Chemistry** (Last 3 in past 72 hrs):

@LABRCNT(ucr:3,uproئت:3,una:3,uk:3,ucl:3,ualb:3,uosm:3,ueos:3,volumeurn:3 )@

d) **Micro cultures**: This does work but isn't that great as it won't tell you where the culture is from (i.e. blood or urine) but it's not that difficult to figure out. This will give you the last 6 cultures done, regardless of when. You can simply change to the “6″ to whatever number you want you get more or less culture data.

@LASTLAB(cult:6)@
Special Communication

Feedback in Clinical Medical Education

Jack Ende, MD

• In the setting of clinical medical education, feedback refers to information describing students' or house officers' performance in a given activity that is intended to guide their future performance in that same or in a related activity. It is a key step in the acquisition of clinical skills, yet feedback is often omitted or handled improperly in clinical training. This can result in important untoward consequences, some of which may extend beyond the training period. Once the nature of the feedback process is appreciated, however, especially the distinction between feedback and evaluation and the importance of focusing on the trainees' observable behaviors rather than on the trainees themselves, the educational benefit of feedback can be realized. This article presents guidelines for offering feedback that have been set forth in the literature of business administration, psychology, and education, adapted here for use by teachers and students of clinical medicine.

(JAMA 1983;250:777-781)

"WE ARE training a group of physicians who have never been observed," Ludwig Eichna, MD, wrote after he courageously took a second turn at being a medical student before stepping down as a department of medicine chairman.1 Dr Eichna's observation is accurate but his statement identifies only part of the problem. Not only are clinical skills infrequently observed, but when they are, the information so obtained does not get to where it can be most helpful—back to the trainees themselves. How widespread a concern is this? One needs only to poll a few medical students or house officers, or think back to one's own training, to appreciate how little attention is given to feedback during clinical training.

The problem of how best to inform trainees about their performance is not unique to medicine; in fact, guidelines already exist in the business administration, organizational psychology, and education literature. This article draws on these sources, along with published research and opinion on medical education plus some personal observations and considers the special role of feedback in clinical medical education. The purpose here is threefold: first, to provide teachers of clinical medicine and their students with an understanding of the feedback process; next, to analyze both the barriers that interfere with feedback as well as the consequences for clinical training if feedback is ignored or handled poorly; and, finally, to provide practical guidelines for offering feedback as a part of clinical medical education.

The Nature of Feedback

The concept of feedback—information that a system uses to make adjustments in reaching a goal—was first appreciated by rocket engineers in the 1940s and has since been applied in many fields. The father of cybernetics, Norbert Weiner, was one of the first to extend the concept to the humanities:

Feedback is the control of a system by reinserting into the system the results of its performance. If these results are merely used as numerical data for criticism of the system and its regulation, we have the simple feedback of the control engineer. If, however, the information which proceeds backwards from the performance is able to change the general method and pattern of the performance, we have a process which may very well be called learning.

The importance of feedback in the acquisition of clinical skill follows from the nature of the clinical method. As a compendium of cognitive, psychomotor, and affectual behaviors, clinical skill is easier demonstrated than described. And, like ballet, it is best learned in front of a mirror. Feedback occurs when a student or house officer is offered insight into what he or she actually did as well as the consequences of his or her actions. This insight is valuable insofar as it highlights the dissonance between the intended result and the actual result, thereby providing impetus for change.1 It is what happens when an attending physician observes a student or house officer performing a history and physical examination, presenting a patient on rounds, mak-
ing decisions about a patient’s therapy, or interacting with other members of the medical team and then transmits the information back to the trainee in a manner that is useful for the trainee’s future performance in that same activity.

Feedback and evaluation are often used interchangeably—a mistake that accounts for much of the confusion surrounding feedback. Distinct from evaluation, feedback presents information, not judgment. Feedback is formative. As an integral part of the learning process, it allows the student to remain on course in reaching a goal. Evaluation, on the other hand, is summative. It comes after the fact and presents a judgment, usually the teacher’s, about how well or poorly a student met a given goal, often in relation to the performance of peers. Evaluation is expressed as normative statements, peppered with adverbs and adjectives; feedback is neutral, composed of verbs and nouns.

Those are the theoretical differences between feedback and evaluation. If students were more like rocket ships and clinical performance more akin to numerical data, the distinction would probably be just that straightforward. Actually, there is almost always a judgment assigned to feedback information. Somehow, on the wards, positive feedback sounds “good,” negative feedback sounds “bad.” There is simply no way that you can inform a student that a differential diagnosis did not include the most likely disease without causing some disappointment or embarrassment. This does not mean that you shouldn’t bring such information to the student’s attention but, rather, that it should be done with some skill and understanding of the process. For the most part, the hazards of providing feedback are not as great as they may seem.

Vanishing Feedback

There are many explanations for the paucity of feedback in clinical medical education. Whether these explanations are valid is another question. The first and most obvious explanation is the failure to obtain the data, i.e., to make firsthand observations of a trainee’s performance. Observations are the currency of feedback and without them the process becomes “feedback” in name only. The observer must be committed to the process; moreover, he or she must have well-formed standards (goals) of clinical competence. It is important to realize, however, that the observed activity need not be a full history and physical examination, and the format need not be a scheduled session. Less formal observations are valuable also. The contact among members of a ward team, for instance, is often sufficient to afford opportunities for observations that can then become the basis for very useful feedback. One must be certain that the observations are valid—obviously, but the many opportunities for providing feedback that are available as part of routine activities in a clinical setting should not be overlooked.

Even if the data are at hand, there are still factors that confound the feedback process. Central to most concerns about feedback is that it will have effects beyond its intent. Both parties, the student and the teacher, make this mistake. The capacity of feedback to elicit an emotional reaction has already been discussed. Experiences with feedback that was handled poorly, in which the techniques for limiting the emotional reaction were not appreciated, may inhibit giving, or receiving, feedback in the future. The teacher may be concerned that the student will be hurt by negative feedback; that it will damage the student-teacher relationship, or the teacher’s popularity; that it will result in more harm than good. The student may view feedback as a statement about his or her personal worth or potential. Students may ostensibly want information about their performance but only insofar as it confirms their self-concept. In that sense they want feeding, not feedback.

Such concerns and misconceptions often result in what is called in the field of personnel management “vanishing feedback,” a term that seems to apply to medical education as well. Anxious about the impact of the information on the trainee, but committed nonetheless to the need for feedback, the well-intentioned teacher talks around the problem or uses such indirect statements as to obfuscate the message entirely. The student, fearing a negative evaluation, supports and reinforces the teacher’s avoidance. The result is that despite the best of intentions, nothing of any real value gets transmitted or received. Even worse, concerns about the impact of feedback may lead to no feedback at all.

Clinical Education Without Feedback

In clinical medical education, the importance of feedback extends beyond pedagogy. The goal of clinical training is expertise in the care of patients. Without feedback, mistakes go uncorrected, good performance is not reinforced, and clinical competence is achieved empirically or not at all.

There are also some less obvious consequences of a system of medical education that does a poor job of providing feedback. To a greater or lesser degree, all students are beset with uncertainty when they begin their clinical clerkships. Without feedback the sense of being adrift in a strange environment is amplified. Students seem to react in a very human way: they generate their own feedback by attaching inappropriate importance to internal and external cues. A raised eyebrow then implies “I'm not performing up to standards.” A brusque response from a resident means “I am really out of place here.” A queasy stomach confirms “I am scared stiff.” This is not terribly worrisome, but as a substitute for feedback, it is hardly reliable and definitely risky. The less forceful student may come to feel totally lost. The student whose reaction to uncertainty is one of overindependence or arrogance may gain a totally unwarranted sense of approval.

Eventually most students do manage to cope with their new environment, but the consequences of inadequate feedback continue. It is easy to see how, in such a system, the importance of written examinations becomes inflated; after all, that is the only way students learn how they are doing. Clinical skills then become secondary to memory skills for students intent on demonstrating their ability. This affects all students—both the strong and the weak. Moreover, for the weaker student, the absence of feedback allows for the
additional jeopardy of learning only after a course of instruction or clerkship has finished that his or her performance had been substandard.

House officers reveal another disturbing consequence of clinical education that fails to provide adequate feedback. In one longitudinal study, house officers confirmed the near total absence of feedback from attending physicians. To fill this void, house officers, not unlike the students, generated a system of self-validation, largely based on unintended cues. But unlike the students', their system developed in tandem with their own sense of mastery. As they began to feel more and more confident, they also began to feel more capable of judging their own performance. Unfortunately, their system of self-validation excluded evaluation from external sources. In fact, much to the amazement of the investigators, the house officers seemed to employ a whole barrage of defenses for dealing with criticism from superiors: they disparaged the source; they regarded the issues as irrelevant; they attributed the criticism to differences in style; or they concluded the criticism was no longer relevant to their current level of performance. Freidson believes these attitudes can endure beyond the training period:

In essence during the course of the postgraduate education, young professionals develop the tendency to fix their standards of performance in such a way as to resist efforts by others to change them. ... Furthermore, as a tendency developed in school, one can visualize it [the residents' resistance to external validation] being carried out in practices which are organized in a characteristically individualistic manner, sustained by reinforcing rules of professional etiquette.

But the problem is not that students are necessarily insecure or that house officers are inherently arrogant. The problem is that their educational environment has failed to provide them with a model of constructive, non-evaluative performance appraisal. If feedback continues to be either embarrassing praise or humiliating criticism, or fails to exist at all, we will continue to see the sorts of reactions that have been described.

When used properly, feedback can be a powerful tool in clinical medical education. It provides the trainee with vital information on his or her performance, thereby setting the stage for improvement. It is phenomenological and therefore gets at an aspect of the clinical process not readily examined by tests of cognitive skills. Finally, it conveys an attitude of concern for the progress and development of the person in a real sense, not only as a function of grades or test scores.

Guidelines for Giving Feedback

Anything that helps the trainee see feedback for what it really is—an informed, non-evaluative, objective appraisal of performance intended to improve clinical skills—rather than as an estimate of a trainee's personal worth will help the process. When feedback fails it is usually because it led to anger, defensiveness, or embarrassment on the part of the trainee. The guidelines presented in the Table are considered standard in the fields of personnel management, group dynamics, and education. They are adapted here for use in a clinical medical setting.

It is preferable for the teacher and trainee to work together as allies, without necessarily obscuring the hierarchy of control. Feedback should occur in a relaxed atmosphere; attention to the setting, and even the seating arrangements, can be helpful. The time, place, and scope of the session should be negotiated, not dictated by the teacher.

At the very outset, both parties should come to an agreement about the trainee's overall performance by first deciding how well the student or house officer fared in a general sense and then considering possible hypotheses to explain any agreed on shortcomings. The student's performance should be measured against well-defined goals. These goals need not be stated formally, as written learning objectives, but they must be meaningful for both parties, and they must be shared. The trainee should take an active part in the process; the teacher's open-ended questions can help break the ice. For example, an attending physician, after hearing a student's presentation, may begin by asking, "How did you think it went?" and then moving on to items like, "What aspects did you think were successful? What aspects need improvement?" If both parties can reach agreement on these questions, they will then have an agenda for the remainder of the discussion. The actual feedback comes when the attending physician shares his or her perceptions of the student's performance with the student. The student's "compliance" with the teacher's recommendations will be that much more effective if the student accepts the "diagnosis" and appreciates the goals of the "therapy."

Feedback works best when it is solicited rather than imposed. In any case, it should not take the trainee by surprise. This does not mean that feedback necessarily should be restricted to scheduled sessions designed solely for the purpose of performance appraisal. On the contrary, the most effective feedback often is that which occurs on a day-to-day basis, as part of the flow of work on the ward, and as close to the event as possible. The point is that the trainee should understand and accept when, where, and how feedback will be given. Feedback that comes unexpectedly, especially if it is negative, almost always is met by an emotional reaction impeding the processing of the information.

Who should give the feedback? Generally it should be given by anyone who is in a position to make a valid observation of the trainee's performance and who is experienced enough with the clinical problem and
the pedagogic problem to offer feedback effectively. The hierarchy of the teaching hospital—attending, resident, intern, and student—allows for an orderly flow of information. (Of course, the flow need not be unidirectional.) Anyone responsible for a subordinate’s evaluation should also be obligated to provide that subordinate with useful feedback. Ironically, the person least able to offer effective feedback is often the person administratively in charge of the educational experience, e.g., the clerkship coordinator, director of house staff training, department chairman, or dean. Unless there is an actual observation of the trainee in action, the source of feedback will be secondhand or third-hand data, gleaned from rating sheets. This usually results in information like, “Dr. Smith said your fund of knowledge was alright but your ability to analyze and synthesize clinical data needs a bit more work.” Dreadful as this sounds, such information passes for feedback all the time.

Any important part of the trainee’s overall job is worthy of including as feedback. A case presentation, the performance of a history and physical examination, a progress note, or observations made about a trainee’s ability to conduct work rounds are all very appropriate. These are observable behaviors and can be assessed against performance goals. On the other hand, personality traits, unless they are manifested in behaviors that can be observed and reviewed, are not appropriate for feedback. The amount of information should be regulated so as not to be overwhelming. In addition, care should be taken to limit the feedback to only those behaviors that are remediable. If behaviors are observed that are not within the trainee’s power to change, these should not be included as feedback. Such deficits, if they are substantial, mean that the trainee should alter his or her goals, not the process by which he or she attempts to meet a goal.

The language of feedback is descriptive and nonevaluation. Statements like “The differential diagnosis did not include the possibility of tuberculosis” are preferable to “Your differential diagnosis is inadequate.” The information should deal with specifics, making use of real examples. Generalizations, such as references to a trainee’s organizational ability, efficiency, or diligence, rarely convey useful information and are far too broad to be helpful as feedback. The information that is fed back to the trainee should deal with actions, not interpretations or assumed intentions. Not only are data based on actions more accurate, but, also, such data allow for psychological distance, so important when the feedback is negative or the trainee insecure. For example, “The antibiotic regimen chosen did not provide coverage for enterococci” is less likely to offend than would “Your choice of antibiotic indicates a lack of appreciation for the possibility of enterococcal infection.” Focusing on the decision, not the decision maker, allows for a dispassionate review by both parties.

Subjective data are perfectly appropriate for feedback about clinical skills. After all, physicians are judged more often by the impressions of patients and colleagues than by objective data. When included as part of the feedback, however, subjective data should be clearly labeled as such. When dealing with personal reactions and opinions, “I” statements should be used. “Watching this video tape, I began to feel that you were not comfortable talking about the patient’s cancer” allows the trainee to view the assessment as one person’s reaction. “You looked uncomfortable talking about the patient’s cancer” suggests that the trainee broadcast a sense of discomfort for all to see. Better still is to focus on the specific behavior: “I saw your hand shaking; you abruptly changed the subject.” This will allow the student to interpret the behavior. Particularly with subjective data, but also with any source of feedback, the teacher should always verify that the message has been received. Having the trainee paraphrase the feedback is helpful, as is inviting discussion or questions.

Finally, the hazards of positive feedback should be appreciated also. Appropriate positive feedback lets the trainee know that the job was done correctly. All too often this comes out as “Gee, what a great job you did,” or worse “You’re terrific!” Such language carries the perils of praise. It implies that the person, rather than his or her work, is under scrutiny. Often, personal praise—as opposed to positive feedback—is downright embarrassing. The really first-rate trainee then withdraws a bit, concerned about appearing to covet the teacher’s favorable reactions. It is safer to bolster pride in a job well done and let a trainee’s self-image develop accordingly. Statements like “That case presentation gave me a very detailed and useful picture of the patient’s problem,” will allow for this. Statements like “You were great when you presented that case,” may not. Also to be avoided is the incessant “good,” “excellent,” “that’s perfect” responses to a trainee’s every statement that approximates a correct answer. Such a steady diet of praise can be addicting.

At first glance some of these guidelines may seem overly fine, as if giving feedback requires one to “walk on glass.” Actually, using precise and objective language is not that difficult. It may require some practice, but the benefits clearly justify the effort. Such language allows one to broach areas that are often avoided. All too frequently, physician-teachers, concerned that their criticism will be taken personally, fail to point out mistakes that could be corrected. Equally often, they pass over opportunities to offer positive reinforcement, once again because of concern that their comments will be taken personally. Both sorts of omissions deprive the student or house officer of what is likely to be an important learning experience.

**Conclusion: Feedback In Perspective**

The important things to remember about feedback in clinical medical education are that (1) it is necessary, (2) it is valuable, and (3) after a bit of practice and planning, it is not as difficult as one might think. It is important, also, to place feedback in its proper perspective within the total process of learning clinical skills. The process begins with exposure to clinical problems. In general, this is handled well in our present system of student and house staff training. No other profession offers its trainees such intense hands-on experience. The process also requires well-defined and readily visible goals. The return of the generalist to the teaching hos-
pital, functioning as both clinician and “role model,” is a step in the right direction. The rush of enthusiasm for performance-based learning objectives as written statements of what the trainee should be able to do is another way, admittedly a less vital way, of highlighting the goals of clinical education. But clinical experiences on the one hand, and role models and learning objectives on the other, are not enough. The process also requires interaction, trial and error, and direction—that’s where feedback comes in.

Ensuring adequate feedback for students and house officers should be an important concern for curriculum and departmental committees when they review and revise their training programs. Feedback should not be a goal of any program; the goal should be improving clinical skills. Feedback can, however, be used as an important indicator of how well a given program is fulfilling its charge. A program that provides sound feedback for its trainees is also one that is staffed by physicians who are skilled observers and able enough as clinicians and teachers to know when a trainee needs a midcourse correction. Such physicians would be dedicated toward improving the clinical skills of their trainees; they would not function as repositories of information or as judges. The trainee’s reaction to the feedback would also be a valid indicator of the program’s success. Like giving feedback, receiving it properly is not always a simple act. It requires maturity, honesty, and selfless commitment to the goal of improving clinical skills—traits that are certainly worth cultivating in our future physicians.

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References

In praise of the physical examination
It provides reason and ritual

If an alien anthropologist were to visit a modern teaching hospital, “it” might conclude that, judging by where doctors spend most of their time, the business of an internal medicine service takes place around computer terminals. The alien might assume that the virtual construct of the patient, or the “iPatient”, is more important than the flesh and blood human being occupying the bed.

But the alien would be wrong—patients are what medical care is all about. Yet the electronic medical record and advanced imaging technology have not only seduced doctors away from the bedside but also devalued the importance of their role there. Indeed, intensive care units exist where consultants conduct their “rounds” on the patients and adjust ventilator settings and drugs via telemetry.

These trends have left educators and trainees in internal medicine in two camps when it comes to the merits of the bedside examination. In the first camp are those who pine for the old days, bemoan the loss of clinical bedside diagnostic skills, and complain that no one knows Traube’s space or Kronig’s isthmus. In the second camp are those who say good riddance and point out that evidence based studies show that many physical signs are useless; some might even argue that examining the patient is just a waste of time.

We believe that the truth is somewhere in between. We argue that clinicians who are skilled at the bedside examination make better use of diagnostic tests and order fewer unnecessary tests. If, for example, you recognise that the patient’s chest pain is confined to a dermatome and is associated with hyperaesthesia, and if you spot a few early vesicles looking like dew drops on rose petals, you have diagnosed varicella zoster and spared the patient the electrocardiography, measurement of cardiac enzymes, chest radiography, spiral computed tomography, and the use of contrast that might otherwise be inevitable. And so many clinical signs, such as rebound tenderness, lid lag, tremor, clubbing, or hemiparesis cannot be discerned by any imaging test.

In the United States, after a three year residency, trainees can become certified by the American Board of Internal Medicine on the basis of a multiple choice test—an examination that has been standardised and well studied. Because the oral clinical examinations of the past, in which external examiners assessed a doctor’s skills at the bedside, were viewed as subjective and not standardised, assessment of such skills was left in the hands of training programme directors, who themselves were ill prepared to conduct the test or be truly objective about their own trainees. Without a high stakes clinical examination looming over them, the bedside skills of trainees atrophy. In short, we now certify interns in the US without an external benchmark that ensures that they can find a spleen, elicit a tendon reflex, detect fluid in a joint, or detect a large pleural effusion by percussion. If the public fully understood this, they would be shocked.

The good news is that in our experience, house staff and junior faculty members are eager to improve their skills at the bedside. They recognise that the clinical examination has value and that it is necessary, particularly because so many of our students and residents have some experience in practising abroad in resource poor settings, where the value of such skills is more obvious. Often they understand the theory of a physical diagnostic manoeuvre but their technique is lacking. To this end we have developed the “Stanford 25,” a list of 25 technique dependent physical diagnostic manoeuvres that we teach to our trainees.

On the list are items such as the funduscopic examination, the thyroid examination, the study of jugular venous pressure and wave forms, and the performance of the Achilles tendon reflex in a bedridden patient—the last is a great example

<table>
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<tr>
<th>The Stanford 25</th>
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<tr>
<td>1 Funduscopic examination for papilloedema, etc, using panoptic and regular ophthalmoscopes</td>
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<td>2 Examination of the pupillary responses and relevant anatomy</td>
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<td>3 Examination of the thyroid</td>
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<td>4 Examination of neck veins/jugular venous distension for both level (volume) and common abnormal wave forms</td>
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<td>5 Examination of the lung, including surface anatomy, percussion technique, identifying upper border of the liver, finding Traube’s space</td>
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<td>6 Evaluation of point of maximal cardiac impulse, parasternal heave, and other precordial movements</td>
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<td>7 Examination of the liver</td>
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<td>8 Palpation and percussion of the spleen</td>
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<td>9 Evaluation of common gait abnormalities</td>
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<td>10 Eliciting ankle reflexes, including in a recumbent patient</td>
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<td>11 Ability to list, identify, and demonstrate stigmata of liver disease, from head to foot</td>
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<td>12 Ability to list, identify, and demonstrate common physical findings in internal capsule stroke</td>
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<td>13 Examination of the knee</td>
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<td>14 Auscultation of second heart sounds, including splitting, wide splitting, and paradoxical splitting</td>
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<td>15 Evaluation of involuntary movements such as tremors</td>
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<td>16 The hand in diagnosis: recognise clubbing, cyanosis, and other common nail and hand findings</td>
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<td>17 The tongue in diagnosis</td>
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<td>18 Examination of the shoulder, specifically testing for rotator cuff tears, the acromioclavicular joint etc</td>
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<td>19 Assessment of blood pressure; identifying pulsus paradoxus</td>
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<td>20 Assessment of cervical lymph nodes</td>
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<td>21 Detection of ascites and abdominal venous flow</td>
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<td>22 Rectal examination</td>
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<td>23 Evaluation of a scrotal mass</td>
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<td>24 Cerebellar testing</td>
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<td>25 Bedside ultrasonography</td>
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of a technique dependent manoeuvre. It is a skill to get the patient to relax, to position the leg properly, and to strike the tendon correctly to elicit a reflex (and it also takes a tendon hammer, which, unlike the ubiquitous stethoscope, is often missing from the pocket of the trainee’s white coat). The Stanford 25 teaches trainees 25 useful manoeuvres, while helping them recognise how nuanced some of these tests are. It also gives junior faculty members a repertoire of skills to teach when they are at the bedside.

A third view of the bedside examination, and one that we advocate, is that it is not just a means of data gathering and hypothesis generation and testing, but is a vital ritual, perhaps the ritual that defines the internist. Rituals are all about transformation. The elaborate rituals of weddings, funerals, or inaugurations of presidents are associated with visible transformation. When viewed in that fashion, the ritual of the bedside examination involves two people meeting in a special place (the hospital or clinic), wearing ritualised garments (patient gowns and white coats for the doctors) and with ritualised instruments, and most importantly, the patient undresses and allows the doctor to touch them. Disrobing and touching in any other context would be assault, but not as part of this ritual, which dates back to antiquity.

We propose that if the ritual is short changed, if it is done in a cursory fashion, if it not done with skill and consideration, if its sacredness seems to be violated, then the transformation (which in this case is the formation of the doctor-patient bond, the beginning of a therapeutic partnership and the healing process) does not take place. We believe that the failure to form that bond could account for a great deal of the dissatisfaction patients express and doctors feel about their encounter.


Secret remedies: 100 years on
Time to look again at the efficacy of remedies

In the linked feature, Jeffrey Aronson describes how the BMA, BMJ, and politicians tried a century ago to end the marketing of secret remedies. They didn’t have much success. Forty years after their endeavours, A J Clark (professor of pharmacology at University College London and later at Edinburgh) could still write, “the quack medicine vendor can pursue his advertising campaigns in the happy assurance that, whatever lies he tells, he need fear no interference from the forefront of British law. The law does much to protect the quack medicine vendor because the laws of slander and libel are so severe.” Clark himself was sued by a peddler of a quack cure for tuberculosis for writing that: “Cures‘ for consumption, cancer, and diabetes may fairly be classed as murderous.” Although he fought the libel case, impending destitution eventually forced him to apologise.

Clark’s claim in 1927 that: “some travesty of physical science appears to be the most popular form of incantation” is even truer today. Homoeopaths regularly talk nonsense about quantum theory, and “nutritional therapists” claim to cure AIDS with vitamin pills. Some of their writing is plain delusional, but much is a parody of scientific writing, in a style that Ben Goldacre calls “sciency.” It reads quite plausibly until you check the references.

One hundred years on from the abortive efforts to crack down on patent remedies, we need to look again at the efficacy of remedies. Indeed the effort is well under way, but this time it takes a different form. The initiative has come largely from an “intrepid, ragged band of bloggers” and several journalists, helped by scientific societies. It hasn’t been helped by the silence of the BMA, the royal colleges, the Department of Health, and a few vice chancellors. Even the National Institute for Health and Clinical Excellence (NICE) and the Medicines and Healthcare Products Regulatory Agency (MRHA) could be helping more.

The response of the royal colleges to the resurgence in magic medicine that started in the 1970s looks to me like embarrassment. They avoided the hard questions by setting up committees (often populated with known sympathisers) so as to avoid having to say “baloney.” The Department of Health, equally embarrassed, refers the hard questions to the Prince of Wales’ Foundation for Integrated Health. It was asked to draft “national occupational standards” for make believe subjects like “naturopathy”.

Two recent examples illustrate the problems. Take first the Pittilo recommendations for statutory regulation of acupuncture and herbal and traditional Chinese medicine. The Pittilo report recommended official recognition by statutory regulation of acupuncture and herbal and traditional Chinese medicine. The Pittilo report recommended official recognition by statutory regulation and entry by honours degree. But you cannot start to think about a sensible form of regulation unless you first decide whether or not the thing you are trying to regulate is nonsense. This idea, however, is apparently lost on the Department of Health and the authors of the Pittilo report. Fortunately, consultation on statutory regulation has attracted many submissions that point out the danger to patients of appearing to give official endorsement to treatments that have no proper evidence base. The Royal College of Physicians seems to have experienced a major change of heart: its submission points out with admirable clarity that the statutory regulation of things that don’t work endangers
patients (though they still have a blind spot about the evidence for acupuncture, partly as a result of the recent characteristically bad assessment of the evidence by NICE). Such enlightenment doesn’t extend to the Prince of Wales, who made a well publicised intervention on behalf of herbalists after the public consultation closed.9

The other example concerns the recent “evidence check: homeopathy” conducted by the House of Commons Science and Technology Select Committee (SCITECH). Oliver Wendell Holmes said all that needs to be said about medicine-free medicines in his 1842 essay, Homeopathy and its Kindred Delusions11 So it is nothing short of surreal to find the UK parliament still discussing it in 2009.

The committee’s proceedings are worth watching, if only to see the admirably honest admission by the professional standards director of Boots that they sell homeopathic pills without knowing whether they work.12 But for pure comedy gold, there is nothing to beat the final session. The health minister Michael O’Brien was eventually cajoled into admitting that there was no good evidence that homeopathy worked but defended the idea that the taxpayer should pay for it anyway. The chief scientific advisor in the Department of Health, David Harper, was not so straightforward. After some evasive answers the chairman, Phil Willis, said, “No, that is not what I am asking you. You are the department’s chief scientist. Can you give me one specific reference which supports the use of homeopathy in terms of government policy on health?” One is tempted to quote Lewis Carroll “but answer came there none.” There were words, but they made no sense.

Then at the end of the session Harper said, “homeopathic practitioners would argue that the way randomised clinical trials are set up, they do not lend themselves necessarily to the evaluation and demonstration of efficacy of homeopathic remedies.” Earlier, Kent Woods (chief executive officer of the MHRA) had said, “the underlying theory does not really give rise to many testable hypotheses.” Why not? The hypotheses are testable, and homeopathy—because it involves pills—is particularly well suited to testing by proper randomised controlled trials.13

It isn’t hard to do better than that. “Imagine going to an NHS hospital for treatment and being sent away with nothing but a bottle of water and some vague promises,” wrote the Sun’s health journalist Jane Symons recently.14 “And no, it’s not a fruitcake fantasy. This is homeopathy and the NHS currently spends around £10m on it.” It isn’t often that a Murdoch tabloid produces a better account of a medical problem than anything the Department of Health’s chief scientific advisor can muster.

World hunger: a reasonable proposal
Commodity markets explain why so many are going hungry in a world of plenty

Last year saw 250 million people added to the ranks of the starving and malnourished, pushing the world total past one billion, or one in every six people, pushing the planet.1 As I read reports of the dramatic upsurge I was reminded of a rainy afternoon in Cambridge two summers ago, when I interviewed Amartya Sen, the Harvard professor who had won the Nobel prize for economics in 1998 for his work on poverty and famine. According to Sen, hunger was not only entirely preventable but profoundly unreasonable.

I had come to Amartya Sen’s house to discuss the recent efforts of the Bill and Melinda Gates Foundation and the World Food Programme to help eradicate world hunger by means of a new programme, called Purchase for Progress. And while our discussion began with the specifics of global food aid, it eventually ranged beyond the particulars of poverty.

“I believe in reason,” Sen told me. “There are those who want to repress reason: Christian, Muslim, and Hindu fundamentalists, and those who pick a totem market economy, the liberal economic state. These are all anti-reason.”

Ironically, at the time of my visit to Cambridge the world’s markets were in the throes of one of the greatest food commodity bubbles of all times, a deeply unreasonable surge of speculation that had already doubled the costs of wheat, rice, corn, cooking oil, and numerous other staples and sparked food riots in 39 countries across the globe. Such price spikes in world food markets had little basis in rationality—the wheat harvest of 2008 eventually proved larger than any wheat harvest in human history. But the damage had been done—a quarter of a billion more people had been relegated to a status the “hungercrats” euphemistically call “food insecurity.”

As world hunger numbers rocketed, the Gates Foundation and the World Food Programme continued to back Purchase for Progress, which has made a totem market economy a panacea for starvation. It is common knowledge
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Where have all the hospital flowers gone?  
They have fallen victim to new definitions of care

Christmas is a time for giving, so it is timely to consider the reasoning behind the extensive and growing ban on giving flowers to patients in hospital. The article by Giskin Day and Naione Carter describes how both individual wards and entire hospitals are using their discretion to prohibit flowers on the ward, in the absence of any official ruling from the Department of Health.\(^1\) It is undoubtedly causing consternation for patients and visitors alike.

The reasons for such prohibitions are varied, something that should immediately make us curious. As Day and Carter point out, some argue that it is about reducing the risk of injury from broken glass, or avoiding the depletion of oxygen in the air from decomposing material, or even avoiding water spillage over modern electronic equipment. In addition, some staff cite the inconvenience of changing water regularly and the inconvenience of disposing of dead flowers. Unsurprisingly, the reasoning behind the extensive and growing ban is not stopped one of the world’s premier capitalists and the world’s largest humanitarian organisation from pursuing various strategies to foster more robust grain markets in the world’s least developed countries. Indeed, one of their chief anti-hunger efforts centres around the creation of commodity markets.\(^2\)

How can commodity markets resolve the tragedy of world hunger? In theory, the forward contracting methods developed by Purchase for Progress will give small farmers the opportunity to arbitrage—and thus stabilise—prices for their product. Instead of all farmers going to market at the same time of year, and thus driving post-harvest grain prices lower and lower, Purchase for Progress will provide the farmers of least developed countries a guaranteed sales price in advance of their harvest. Such price guarantees will provide a measure of financial security; collateral for loans from local bankers; and thus the opportunity to purchase fertiliser, farm equipment, and perhaps even some day labour for the upcoming harvest.

All this may sound like a pretty good idea, but programmes like Purchase for Progress take for granted the idea that free market dynamics can transform the indigent peasant into a bona fide agribusinessman, and that assured future sales of grain will increase output, help alleviate local conditions, and thus mitigate world hunger.

But as the titans of global food aid seek solutions to mankind’s greatest health threat—a hunger related death every four seconds—they may do well to remember Amartya Sen’s warning and retain a healthy scepticism regarding the worship of a totem market economy. Free markets may have worked well for oligopolists like Bill Gates, but the World Food Programme cannot simply will them into existence. In fact, the imposition of commodity markets within the world’s least developed countries has a history of failure.\(^3\)

It took hundreds of years for modern commodity markets to develop in London, Chicago, and New York, and these markets rode the back of heavy investments in infrastructure, transportation networks, and agricultural education. The Chicago Board of Trade may have facilitated American farmers, grain storers, and millers in their efforts to produce and manage grain surpluses, but futures markets cannot resolve the intractable political, economic, and social ills of—for example, Uganda or Guatemala, and provide a short cut to food security. Such programmes will benefit bankers more than farmers, and perhaps further alienate the rulers from the people starve when the daily pay check doesn’t cover the daily bread.

All of which is not to say that small farmers do not need our help. But instead of installing futures markets and teaching the nuances of arbitrage, Bill Gates and the World Food Programme might consider expending their manifold resources on emergency income creation and employment programmes. Perhaps even more important, small farmers and landless peasants need to be supported in their efforts to gain political voice and power. As Amartya Sen has pointed out, there has never been a famine in a representative democracy.\(^4\) A political voice is often the shortest path to a full stomach. Finally—strange as it may seem—the best early warning system for a hunger crisis is not a futures market but a free press. Rulers do not like to see their starving subjects on the front page.

Gates and the World Food Programme could spend their money to much better effect than on a programme like Purchase for Progress, because the totemic worship of liberal free market economics is not a reasonable solution to world hunger. And in this particular case, not being reasonable has fatal consequences.


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Where have all the hospital flowers gone?  
They have fallen victim to new definitions of care

Christmas is a time for giving, so it is timely to consider the reasoning behind the extensive and growing ban on giving flowers to patients in hospital. The article by Giskin Day and Naione Carter describes how both individual wards and entire hospitals are using their discretion to prohibit flowers on the ward, in the absence of any official ruling from the Department of Health.\(^1\) It is undoubtedly causing consternation for patients and visitors alike.

The reasons for such prohibitions are varied, something that should immediately make us curious. As Day and Carter point out, some argue that it is about reducing the risk of injury from broken glass, or avoiding the depletion of oxygen in the air from decomposing material, or even avoiding water spillage over modern electronic equipment. In addition, some staff cite the inconvenience of changing water regularly and the inconvenience of disposing of dead flowers. Unsurprisingly, in the context of invigorated concern around hospital cleanliness, the most common explanation relates to hygiene—that either the flowers themselves, or the water in their vases, carry a risk of infection.

However, none of these explanations has a secure evidence base. Although it is not surprising to learn that flower water can contain bacteria,\(^5\) rigorous studies have emphatically concluded that bedside flowers pose no particular threat to health.\(^6\) But what is of interest is just how widespread the bans are, despite the evidence.

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Post hoc rationalisations of practices seem, by definition, logical and sensible—using partial bits of knowledge to mask, often from the protagonists themselves, the fact that an a priori decision was based not on facts but on values. For this reason, even compromises such as those Day and Carter present—for example, specifying the best kind of flowers or designating a shared common place—are no less perplexing, because they indirectly reinforce the idea that flowers are essentially inconvenient or pose some kind of hazard.

Of course, this may not seem particularly important for hospital staff in the context of their extensive responsibilities, and we should be sympathetic to this. But the matter is important to patients and their visitors. The point about giving is that it reinforces meaningful relationships of love and friendship. And hospital gifts are perhaps even more nuanced than this. Firstly, the gifts are traditionally ephemeral in nature—whether flowers, fruit, or chocolate, there is something reassuring about them lasting a finite period, echoing the hope that soon the patient will recover and head home. Secondly, although giving flowers can be a sign of private intimacy, in a hospital setting the flowers also publicly demonstrate social ties beyond visiting hours. A patient looking at a bouquet doesn’t just see the flowers but the person who gave them. And a nurse or doctor is often part of this— remarking on the gifts in small talk, and consequently becoming entangled in a comforting form of interaction.

The apparent intransigence of hospital staff in the face of evidence suggests there might be more to this ban than merely the flowers themselves. In anthropological terms, hygiene is not defined by things being essentially “dirty,” but by things being perceived to be in the wrong place—for example, soil is fine in the garden but dirty when on the carpet. So how is it that although flowers were once fine at a hospital bedside, they are suddenly in the wrong place and therefore essentially “dirty,” but by things being perceived to be in the wrong place?—for example, soil is fine in the garden but dirty when on the carpet. So how is it that although flowers were once fine at a hospital bedside, they are suddenly in the wrong place and therefore unclean? Perhaps it is because flowers can mark out a space, domestic and non-clinical, where a different mode of relating can take place, and it is this that is really out of place on a modern ward.

Underlying all the explicit arguments, the decision to ban flowers seems to reflect a much broader shift towards a model of care that has little time or place for more messy and nebulous elements. The development is not the articulation of rational science but increased rationalisation in the sociological sense, which equates with technical efficiency coupled with greater bureaucracy and accountability. The practice of healthcare delivery—with more prescriptive guidelines and targets, greater demands on time, and more explicit professional roles—means that there is simply not room for the more vague, apparently superfluous, practices on a well functioning ward. The flowers have been elbowed out.

And so, in the context of health priorities, such an apparently inconsequential policy reflects a more general shift in current definitions of care. At this time of year, despite all the calls of commercialisation and trivialisation, in truth most of us still value ritualised contact with loved ones and the demonstration of relationships through giving and receiving. Perhaps, then, now is a good time to think about a broader version of care that increasingly needs to be protected on the ward and within the everyday practices of a hospital. Such a version of care would be thought of as not an outcome that can be delivered but as a relationship that can be exchanged.

**References**

State of the art gender medicine

Anita Rieder

In recent years gender-specific issues and how they influence the health of men and women have increasingly attracted public attention as well as interest from those working in healthcare and prevention. We have learned that gender is of great relevance not only in research but also in day-to-day medical practice. Pioneers in gender-specific medicine have called for comprehensive, gender-specific, medical models, which also take into consideration socio-economic conditions and interconnect the fields of scientific research, clinical medicine and public health. But what have we actually achieved over the past few years? What exactly is state-of-the-art gender medicine and how do we attain it?

Identification of gender as a factor to be considered in health issues of men and women has brought with it its own set of definitions [1]:

- Gender refers to the array of socially constructed roles and relationships, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes on a differential basis in contrast to “sex” which refers to the biological characteristics that define humans as female or male
- Gender analysis is a systematic way of looking at the different effects of development, policies, programmes and legislation on women and men that entails, first and foremost, collecting sex-disaggregated data and gender-sensitive information about the population concerned
- Gender equality entails the concept that all human beings, both men and women, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, or prejudices
- Gender equity means fairness of treatment for women and men, according to their respective needs
- Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels

Gender differences influence health in a variety of ways:

- Biological differences, such as, genes, hormones, and different morbidity risks
- Acquired risks, such as, risk of disease and risk of accidents in the workplace, due to free-time activities, lifestyle, psychological distress, and social environment
- Psychological aspects of symptoms and treatment including how symptoms are perceived and rated in terms of severity, as well as reaching a decision and implementation of treatment

Further gender also influences the way in which symptoms are reported, presented, and spoken of, and finally it can influence the treatment priorities set and medical attendance [2].

Clearly this leads us to ask the following questions:

- How can information on gender differences find its way into preventive, diagnostic, and therapeutic methods in clinical practice today?
- How can insights, not only into biological differences, but similarities, be used effectively to improve the state of health of the patient and optimize medical care [3]?
- Are we teaching and, if so, how are we teaching students the basic principles of gender medicine together with the newest and most relevant gender issues for their daily work in health care [3]?

It is said that “medical school is but a microcosm of society”. This begs the question to what
extent gender is represented in the medical curricula? In an EU research project The Department of History, Ethics, and Philosophy of Medicine at the Medical University of Hannover evaluated all European medical curricula for the extent and integration of gender-specific teaching offered. As the project progressed it became clear that across Europe no such teaching model exists, within the scope of medical education [4]. The lack of basic reference texts in this field has spurred the production of textbooks to underpin study, such as Principles of Gender Medicine [5] and our own textbook in the German language Gender Medizin [6], which aims to investigate which gender specific similarities or differences are clinically relevant, irrelevant or known, what scientific and clinical evidence is currently available and whether this influences clinical diagnosis, therapy and outcome, and finally to identify whether practical recommendations may be made and what these are. Clinical physicians and public health experts were asked to review the situation in their field of expertise with respect to gender.

“Publications continue to debunk the myth that heart disease is a man's disease [7]”. Unfortunately there are still obstacles that hinder gender-specific research with respect to health and disease and, as such, hold up the development of gender-specific strategy for health promotion and disease prevention. No evidence of change in the inclusion of women in cohorts in most cardiovascular disease studies, e.g. those researching heart failure or arrhythmias has been found. Although women were included in randomized trials, data pertaining to women were often not collected and not always reported in published findings. Only 20% of articles on coronary heart disease provide separate findings on women [8].

In 2003–2004 The Hannover Cardiovascular Group Project Working group (Rieder A, Voss A, Wimmer A, Lohff B, unpublished) undertook a review of all key papers in connection with cardiovascular disease and found women to be underrepresented. Of 489 studies 32.3% of study participants were women, 8% of the studies only included men and 1% only included women.

Higher incidence and prevalence rates of cardiovascular diseases in middle-aged men have left the impression amongst women and those working in the field of health that coronary heart disease almost exclusively affects middle-aged men. However, due to the higher life expectancy amongst women, cardiovascular diseases have become just as much of a problem in women, albeit at a later age. Coronary heart disease is the leading cause of death amongst women from the age of 65 years. The alarming trends in prevalence of cardiovascular disease in women and failure to specifically address risk factors for women prompted a consensus statement in the form of a Guide to preventive cardiology for women and the updated Evidence-based guidelines for cardiovascular disease prevention in women which highlight risk factor management strategies appropriate for women with a broad range of cardiovascular disease risk [9,10].

“State-of-the-art” has been defined as “the highest degree of development of an art or techniques at a particular time” [11]. Gender medicine is still in the descriptive research phase and it has become clear that future studies need to focus greater attention on the assessment of patient outcome and other indices of care quality with respect to gender.

The way to state of the art gender medicine must include evaluation of ongoing practice by means of a gender analysis. New procedures should be developed and ongoing practice adapted accordingly, including also the practical application of new research findings. Evaluation and appraisal should follow the principles of evidence-based medicine by asking answerable clinical questions, searching for evidence, critically appraising the evidence for validity and relevance, decision making, integrating evidence with clinical expertise and patient’s values, as well as by evaluating performance [12]. Evidence-based practice involves systematically seeking out and examining all evidence, where possible quantifying it, and taking this evidence into consideration in all healthcare decisions. However we must not forget that evidence does not make decisions, people do.

As with all new ideas there are many problems to deal with. Gender traps (stereotyping), gender bias, gender barriers, the gender gap and other gender challenges lie in wait. “Old habits die hard” as they say and new concepts take their time to penetrate the surface and become an integral part of medical practice. Misinformation and misrepresentation can produce a negative image, as experi-
enced recently in Germany where “gender mainstreaming” was reportedly becoming a playground for bureaucracy, a few experts, and above all wasting money (Stern magazine, 17th March 2005).

Serious efforts are, however, being made. This year the Committee of Experts on the Inclusion of Gender Differences in Health Policy was set up by the Council of Europe, in Strasbourg. The key aims of this committee are determining what is good practice and drawing up clear recommendations on how to integrate the biological, cultural and social dimension of gender into the Council of Europe Member States’ public health programmes (prevention, diagnosis, care), as well as, integrating the gender dimension in training programmes for the health professionals.

“Being a woman or a man is a HEALTH DETERMINANT that is as significant as social origin, economic situation and ethnic origin” (Strasbourg, April 2005, Expert Committee meeting). Ultimately through practising evidence-based gender medicine we want to achieve optimal prevention and early detection of risk factors and risks, the prevention, early detection, and appropriate treatment of diseases, reduction in morbidity and mortality, and an increase in health and life expectancy for women and men, boys and girls alike. Furthermore the aim is to raise the chances for healthy ageing and reduce risks for long-term care and premature care, reduce risks from socioeconomic circumstances (gender role, education, unemployment, low income etc.) and improve quality of life.

Looking to the future, not only do differences between men and women in prevalence and severity of illness and disease development present a major challenge but also determining the relative contributions to gender-specific health of biological and social factors. Gender-specific matters have increasing relevance for day-to-day practice and research findings have the potential to bring about policy changes. It is, therefore, vital that clinical research, medical education practical applications of research findings and public health take a gender-based approach. Gender-specific medicine has a major responsibility to meet societal needs and to contribute to societal values of health research.

References
nation of pet food, a detection method involving liquid chromatography–mass spectrometry became widely available and reliably identifies both cyanuric acid and melamine. A number of suspect foods from China tested by the FDA were found to contain melamine (see table), and more are being reported around the world each week. Furthermore, the FDA has found trace levels of melamine in several U.S. infant formulas and, as of the end of November, states that 1 part per million is permitted.

Yet it is not certain what should be done going forward. In the United States, common-sense suggestions have been posted on the Web sites of both the FDA (www.fda.gov/oc/opacom/hottopics/melamine.html) and the Centers for Disease Control and Prevention (http://emergency.cdc.gov/agent/melamine/chinafood.asp), and similar content is available on the WHO Web site (www.who.int/foodsafety/fs_management infosan_events/en/index.html). The pediatric nephrology community, the American Society of Pediatric Nephrology, and the International Pediatric Nephrology Association recommend vigilance without panic (www.aspneph.com/ASPNStatement%20Melamine%20Oct22_cbl%20(3).pdf). All these organizations suggest examining at-risk children exposed to the brands of infant formula, such as Sanlu, that are known to have been heavily contaminated by melamine.

The bottom line, however, is that nobody knows the true extent of the present epidemic or the risks to come. No more deaths have been reported since the Chinese government and the international public health community became aware of the problem. Yet the long-term health effects remain unknown.

In today’s world, it is crucial to understand and deal with the global implications of foodborne diseases if problems like the melamine epidemic are to be prevented. In 2006, the WHO launched an ambitious project to estimate and understand the global burden of foodborne disease, and the Foodborne Disease Burden Epidemiology Reference Group appears to be well on its way to achievement of its initial goals. In addition, the group will be developing much-needed user-friendly tools so that outbreaks, be they due to organisms or chemical substances, can be studied more rapidly and the causes identified, reported, and eliminated.


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**Culture Shock — Patient as Icon, Icon as Patient**

Abraham Verghese, M.D.

On my first day as an attending physician in a new hospital, I found my house staff and students in the team room, a snug bunker filled with glowing monitors. Instead of sitting down to hear about the patients, I suggested we head out to see them. My team came willingly, though they probably felt that everything I would need to get up to speed on our patients — the necessary images, the laboratory results — was right there in the team room. From my perspective, the most crucial element wasn’t.

For the next few weeks, I ensured that we spent as little time as possible in the bunker. These were excellent residents who cared enormously about patients’ welfare. They enjoyed being shown common findings — white nails of liver disease, an accessory nipple, Dupuytren’s contracture, parotid enlargement, spider angiomas, café au lait spots, the paradoxical splitting of the second heart sound in left bundle-branch block, signs of pseudo-
PERSPECTIVE

bulbar palsy — which today are uncommonly recognized. When I stroked a patient’s palm and caused a twitch of the mentalis muscle under the chin — the palmamental reflex — it was as if I were performing magic. Still, the demands of charting in the electronic medical record (EMR), moving patients through the system, and respecting work-hour limits led residents to spend an astonishing amount of time in front of the monitor; the EMR was their portal to consultative teams, the pharmacy, the laboratory, and radiology. It was meant to serve them, but at times the opposite seemed true.

This ward experience highlighted for me an evolving tension between two approaches to patients. In the first way — call it the traditional way — the body is the text, a text that is changing and must be frequently inspected, palpated, percussed, and auscultated. The scent in the room, a palpable word. The financial costs of imaging, and lessons in humility that trainees might experience by learning from the real patient’s body examined at the bedside. When residents don’t witness the bedside-sleuth aspect of our discipline — its underlying romance and passion — they may come to view internal medicine as a trade practiced before a computer screen.

If we in academia have managed to ignore the loss of bedside skills, our patients see the deficiency easily. Patients recognize how the perfunctory bedside visit, the stethoscope placement, through clothing, on the sternum like the blessing of a potentate’s scepter, differs from a skilled, hands-on exam. Rituals are about transformation, and when performed well, this ritual, at a minimum, suggests attentiveness and inspires confidence in the physician. It strengthens the patient–physician relationship and enhances the Samaritan role of doctors — all rarely discussed reasons why we should maintain our physical-diagnosis skills.

In my years of teaching, I’ve found that residents increasingly approach the patient with little expectation of discovering tangible findings. When such a finding presents itself, it is the exceptional resident who pursues and refines the observation, most being content to murmur vaguely about a murmur without describing its qualities, the effect of the Valsalva maneuver, the location of the apical impulse, the presence
of a parasternal heave, or key ancillary findings. Because the echocardiogram, magnetic resonance image (MRI), and computed tomographic scan precisely characterize anatomy, the physical exam is too often viewed as redundant. Indeed, the EMR template requires just one click to fill in, “Heart: regular rate and rhythm, no murmurs or gallops,” and it is an effort to change it. In short, bedside skills have deteriorated as the available technology has evolved.

How did we reach this state of affairs? The fault is ours as teachers of medicine. We don’t expect much from trainees at the bedside. If we did, we’d insist they carry ophthalmoscopes, tuning forks, and tendon hammers. Being the attending on a teaching service nowadays requires visiting once or twice daily, being present for procedures, and documenting everything. Senior physicians with strong bedside skills are opting out of this time-consuming duty, so residents have little exposure to them. Attendings are therefore often recently trained internists, knowledgeable about hospital-based systems, quality measures, critical pathways, and informatics — but the bedside exam may not be an area of interest or strength.

Younger physicians often argue that physical signs lack an “evidence base.” Clearly, some signs are helpful, some are not, and we need continued study in this area. But recognizing erythema nodosum or decreased breath sounds and dullness over a large pleural effusion is worthwhile in and of itself. Final-year medical students are now forced to travel to regional testing centers to take a costly “clinical skills” exam that, using actors, assesses communication, cultural sensitivity, and diagnostic reasoning — but without real patients with abnormal physical findings, it can hardly test true clinical skills. Board certification in internal medicine hinges on a multiple-choice exam; it is left to residency program directors to sign off that candidates have sufficient clinical skills. The public would be scandalized if pilots were allowed to fly without ever having been in the air with a seasoned examiner; medicine’s standards should be no lower. The few times I’ve been asked to watch my own senior residents perform a physical, I have been loath to be the person to hold them back when their skills were probably no different from those of their peers around the country. Surely this system of certifying our own residents as competent bedside clinicians is flawed. Though the oral exams of the past could be highly subjective, we might take a lesson from Canada, where becoming a Fellow of the Royal College of Physicians and Surgeons requires passing a written test and then a 2-hour oral during which examiners observe the candidate at the bedside, examining his or her technique and physical diagnosis skills, with real patients in past years and now with standardized patients who may or may not have findings consistent with the clinical scenario presented to the candidate. I have no doubt that if our residents had to prepare for such a test, they would quickly develop great bedside examination skills.

At our institution, we’ve begun a new initiative working with our enthusiastic chief residents to build pride and satisfaction in bedside skills. Residents’ hunger for such training has been a revelation, and it perhaps reflects the fact that so many of them plan an international experience during their training and recognize their weakness in the physical exam. I truly believe that good bedside skills make residents more efficient.

We teach that physical findings should be considered biomarkers, phenotypic markers — better terms than “physical signs” (an idea suggested by Dr. Atul Butte at Stanford). An enlarged spleen, Roth’s spots, a Virchow’s node, and jugular venous distention are all biomarkers that should be factored in with the high calcium level, the abnormal MRI, and other data to arrive at a true picture of the patient. Failure to recognize these biomarkers is an oversight akin to not seeing a key laboratory value in the chart.

To teach these skills, we first identified a select group of mas-
ter clinicians. This step was easy — professionals at every institution seem to know who these physicians are. We have invited master clinicians from other institutions to round with our residents, to challenge them and demonstrate techniques. Regular bedside rounds and faculty-development sessions showcasing good bedside technique demonstrate the excitement of this approach and, we believe, will bring about cultural change.

I feel fortunate to live in this age of incredible technology, with its remarkable new ways of seeing the body. I am excited about portable ultrasonography, for example, which allows us to instantly confirm findings at the bedside and discover the limits of our own skills. We need more of that kind of translational work — to develop the next generation of stethoscopes, ophthalmoscopes, and tendon hammers. Surely having physicians become more discerning, more comfortable, and eager to spend more time at the bedside is a good thing for patients. For the clinician, the bedside is hallowed ground, the place where fellow human beings allow us the privilege of looking at, touching, and listening to their bodies. Our skills and discernment must be worthy of such trust.

No potential conflict of interest relevant to this article was reported.

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First day parking (unless you have an employee parking permit)

SANTA CLARA VALLEY MEDICAL CENTER
CAMPUS MAP DIRECTORY
CASE LOGS

MedHub software provides a diagnosis/case log tool for entering patient log data.

INSTRUCTIONS

Logging a Diagnosis

- Home page > Procedures tab > New Procedure/Case Log

- Clerkship/Course: select the appropriate Clerkship
- Procedure Date: please select a generic date, such as the first or last day of the period, for HIPAA compliance
- Location: select the appropriate Clerkship site
- Supervisor: select from list

For HIPAA compliance, please select the first or last day of the period. Do not enter the exact date.
• Scroll to Diagnoses section
  o Select from the list of required Diagnoses for the Clerkship
  o Select the appropriate Role
  o You may only log ONE diagnosis per procedure log

STEP 1: Select a Diagnosis

STEP 2: Once a Diagnosis has been selected, choose appropriate role

• Scroll to Notes section
  o Enter any notes as required by clerkship
• Select “Log Procedure”
  o To enter another procedure, check the green box

** Be sure not to enter any identifying patient data due to HIPAA
View Procedures/Cases
To review or modify previously submitted Case Logs:

- Home page > Procedures tab > View Procedures/Case Logs

- Review list of all submitted Diagnoses
- View or modify individual logs
- Can also log a new procedure from this view
  - “+ Log New Procedure”
Medical Smartphone Apps

Below is a brief overview of smartphone applications that may be helpful during your clinical rotation. In truth, you may find these applications to be vital well beyond medical school and residency. Most of these apps can be downloaded through your smartphone’s market (unless otherwise noted below). Most of these apps are available for tablets as well.

**Epocrates:** Chances are you already know and use this application. Epocrates is one of the most popular pharmacology reference programs. It keeps all information up to date and it’s free. Besides providing dosing calculations, it provides adverse reactions and utilizes a drug interaction algorithm. For an annual fee, Epocrates also offers information on diseases and laboratory data.

**Dynamed:** This may be one of the most powerful medical reference programs for the smartphone. Dynamed has a large database of topics, comparable to UpToDate. The difference is how this information is organized. While UpToDate has paragraphs of information, Dynamed is organized in bullet point making it more ideal for the smartphone. Dynamed’s smartphone app is downloaded onto the phone so that it can be accessed while offline. It also contains pharmacology reference and differential diagnosis information. The largest drawback for this program is its price. You have to contact Dynamed (http://www.ebscohost.com/dynamed/) to inquire about purchasing.

**5 Minute Clinical Consult:** Very similar to Dynamed in its organization and fully downloadable onto your phone. However, the breath of information is not a large as Dynamed. Major advantage is cost is significantly less and can be purchased via the market.

**Diagnosaurus:** Great differential diagnosis program. This can be very useful with your workup of a patient based on their presentation.

**Sanford Antibiotic Guide:** One of the most well-respected resources for infectious diseases. It contains the same information as the pocket book.

**John Hopkins Antibiotic Guide:** Another great resource for infectious disease. This will give you information based on the antibiotic or pathogen. For example, you can look up pseudomonas and it will tell you where it lives, what antibiotics to use and other useful information.

**Medical Calculators:** There are many medical calculators available: simply type “medical calculator” in the app market. A couple good calculators include “Calculate” by QxMD and “Archimedes” by Skyscape. Both of these are free. Archimedes 360, which has a larger number of calculators, is available for sale.
US Dept. Health Services, Agency for Healthcare Research and Quality (AHRQ): This free application is for outpatient primary care doctors and students. It reminds you what to screen for after you input a patient’s basic information such as age and sex.

Lane Library Express (http://lane.stanford.edu/m): This is not an app, but a mobile website for the smartphone created by Lane Library. It will allow you to stay logged in for up to 2 weeks at a time to help get to Pubmed and UpToDate quicker from your phone.

New England Journal of Medicine: Great way to access the resources of NEJM through your phone. Currently, it is only available for iPhone.

Medscape: Great application for the phone. Has information on medical news, medications and case presentations.

Skyscape & UnBound Medicine: Skyscape (www.skyscape.com) focuses on creating mobile phone apps for all healthcare professions and boasts over 600 apps spanning 35 specialties. They formulate popular textbooks into searchable programs on the smartphone. There are many notable apps including Massachusetts General Hospital’s Pocket Medicine and The Washington Manual of Medical Therapeutics. Unbound Medicine (www.unboundmedicine.com) produces a similar product offering. Both companies have apps available for virtually every category including pharmacology, medical references, and medical dictionaries.

Medical Dictionaries: There are many medical dictionaries for the smartphone. Three of the most popular include: Taber’s Medical Dictionary, Stedman’s Medical Dictionary and Dorland’s Medical Dictionary. All three require a purchase.

Medical Abbreviation Programs: There are also many medical abbreviation programs. One such free application is “Medical Abbreviation Dict.”

Websites:
At Stanford, there are a number of websites to help with education and patient care. Below is a review of some of the most popular and important sites.

Lane Library (lane.stanford.edu): The Lane Library website serves as the as the main location where most other websites are entered after logging in. Many of the websites listed below are accessed through the Lane Library. There is also access directly to journals (if the link to full-text in Pubmed is not working), ability to request articles from DocXpress, community news, upcoming lane classes and much more.
Pubmed (Lane Library Website → click “Pubmed”): Journals database. Often times, reviews on various subjects can be as educational as reading UpToDate.

UpToDate (Lane Library Website → click “UpToDate”): One of the most popular resources for medical reference. UpToDate also has some online calculators (type “calculators” in search) and tutorials such as their ECG tutorial.

Clin-eguide (Lane Library Website → click “Clin-eguide”): Clin-eguide is a meta-search engine with number of other useful tools. You can search specific diseases in multiple databases including Medline, 5-Minute Clinical Consult and Ovid. There are also differential diagnosis tools and online medical calculators.

Stanford Residency Education & Resource Site: (errolozdalga.com/medicine) This website is still in building phases and located at a temporary address until it is updated to be moved to a stanford.edu URL. Currently, there is information taken from the residency program’s morning reports and other lectures. There are also some resources such as antibiograms and antibiotic dosing charts.

Epocrates (http://www.epocrates.com): Much like the smartphone application, this website (after logging in, for free) will provide all the same pharmacology reference, including their drug interaction checker.

Micromedex (Lane Library Website → click Micromedex): Another great resource for medication information. This is what our pharmacists use.

MD Calc (http://www.mdcalc.com/): MD Calc is a very useful site for quick calculations and risk scores. Some of the most useful calculators on this site include: FeNa calculator, creatinine clearance estimation and Well’s Criteria for PE.

Med Calc (http://www.medcalc.com/): Similar to MD Calc but has less calculators. However, some of these calculators are very useful. The calculator for both hypernatremia and hyponatremia allows for quick and practical calculations.

Amion: (www.amion.com): Can check who is on call. Type the passwords below for Stanford or VA
  –Stanford: “stanim”
  –VA: “pava”

Smartpage: (smartpage.stanford.edu): Paging system at Stanford and the VA.
Professionalism and Mobile Devices: Guidance for the Clinical Setting

Students participating in the iPad clerkship pilot project, as well as all students who use any type of mobile device in the clinical setting, need to pay careful attention to professionalism and etiquette when using these devices. Please see the guidelines below. We’ve also included some sample phrases that you can use with patients, based on physician experiences with these devices.

1. **Comply with all patient privacy policies.** Use all devices in accordance with HIPAA policies. Use strong passwords, log off all applications, save nothing to your device, take no photos nor videos, and treat any device you use in clinics with special care.

2. **Different sites, different rules.** In addition to varying degrees of Internet access at sites, there will also be variance as to how mobile devices are (or are not) used in different clinical settings. Avoid making assumptions about what is acceptable; ask site staff or your resident to advise you.

3. **Explain to your patient why you are using a mobile device.** Tell the patient what you are looking at on your mobile device, and gain their cooperation (“I will be looking at your medical record while I’m talking with you; is that okay?”).

4. **Be aware of your line of sight with the patient.** Position your mobile device so that you are directly facing your patient.

5. **Let your patient know if you will need to break eye contact for any sustained period of time.** Give them a signal in advance that you will be averting your eyes (“Please hold on for one minute while I type”).

6. **Avoid using your mobile device to check your email or do unrelated web searches in the presence of patients.**

7. **Where appropriate, engage the patient with information on the device.** Examples would include patient education, showing a patient his/her lab values or showing a parent his/her child’s progress on a growth chart.

8. **If you are not using the device, close it.** This maximizes the time when the patient senses that they have your full attention. Close your iPad; put your smartphone in your pocket.

9. **Practice.** The ability to utilize a mobile device while maintaining patient-centeredness is an art. Practice with friends and/or family, and ask for their feedback. Discuss challenges with your colleagues, learn from them, and share what works for you.

*Thanks to Dr. Clarence Braddock for sharing his own best practices in use of the iPad in the clinical setting.*
The Bedside Evaluation: Ritual and Reason

Abraham Verghese, MD; Erika Brady, PhD; Cari Costanzo Kapur, PhD; and Ralph I. Horwitz, MD

The bedside evaluation, consisting of the history and physical examination, was once the primary means of diagnosis and clinical monitoring. The recent explosion of imaging and laboratory testing has inverted the diagnostic paradigm. Physicians often bypass the bedside evaluation for immediate testing and therefore encounter an image of the patient before seeing the patient in the flesh. In addition to risking delayed or missed diagnosis of readily recognizable disease, physicians who forgo or circumvent the bedside evaluation risk the loss of an important ritual that can enhance the physician–patient relationship. Patients expect that some form of bedside evaluation will take place when they visit a physician. When physicians complete this evaluation in an expert manner, it can have a salutary effect. If done poorly or not at all, in contrast, it can undermine the physician–patient relationship. Studies suggest that the context, locale, and quality of the bedside evaluation are associated with neurobiological changes in the patient. Recognizing the importance of the bedside evaluation as a healing ritual and a powerful diagnostic tool when paired with judicious use of technology could be a stimulus for the recovery of an ebbing skill set among physicians.

The introduction of percussion by Auenbrugger in 1761 and the stethoscope by Laennec in 1819 helped 19th-century physicians make anatomical and pathophysiologic diagnoses. These diagnostic advances signaled a departure from the practice of barber surgeons, who had empirically bled, cupped, and purged since medieval times, and made little effort to ascertain what ailed the patient. In the first half of the 20th century, the bedside evaluation—a term we will use to mean “eliciting the history and performing the physical examination”—was the most important means of diagnosis (1). Sir William Osler called it one of the “principles of practice,” adding that “the whole art of medicine is in observation” (2). However, the use of sophisticated imaging and laboratory testing has dramatically increased in recent decades. Consequently, physicians often substitute these tests for the bedside evaluation. It is not uncommon for a patient in the emergency department to have an imaging study before being seen by a physician. Armed with an “answer,” the physician may then perceive little value in talking to or laying hands on the patient. During the day-to-day monitoring of hospitalized patients, the bedside evaluation is often perfunctory as the patient’s “numbers” become the focus of the various individuals caring for the patient.

Although these technologic advances have changed the means of diagnosing and monitoring the patient, they have also contributed to the atrophy of bedside evaluation skills. Medical school curricula generally include physical diagnosis courses during the first 2 years, yet when medical students arrive on the wards and in the clinic, they may see that visits to the bedside are perfunctory; the virtual patient in the computer—the “iPatient” (3)—seems to provide what clinicians need to render care. The electronic medical record, with its drop-down menus to record the physical examination, correlates poorly with what actually happened at the bedside because the examination is viewed by some as a burdensome requirement of insurers that must be documented to justify payment (4).

Some physicians worry that waning bedside skills lead to delays and errors in diagnosis and subject the patient to unnecessary testing and its downstream consequences. Others argue that the bedside evaluation is redundant and poorly reproducible compared with imaging and laboratory testing.

Pitting bedside skills against technology creates a false dichotomy. We believe that wedding masterful bedside skills with judicious use of technology will benefit patients most and result in more cost-effective care. Beyond these advantages, the bedside evaluation has therapeutic importance as a ritual that helps to establish a bond between patient and physician.

VALUE OF THE BEDSIDE EVALUATION AS A RITUAL

Common patient complaints, such as “my doctor never touched me” or “the doctor never laid a hand on me,” suggest that patients sense the loss of a valued ritual. The emphasis on tests over the bedside evaluation conveys to the patient that he or she is no longer the primary focus. Although much has been written about the therapeutic and symbolic value of the laying of hands (5–9), those discussions are more about touch than about the ritualistic aspects of skilled examination. We believe that deconstructing the bedside evaluation as a ritual can help us understand how to use it to better serve patients and the profession.

Rituals, such as baptism or marriage, typically signify a rite of passage—a crossing of a threshold or bringing about a transformation in status or commitment. With its role in patients’ transitions from sickness to health, the bedside evaluation is similar to these rituals. We use ethnography as a conceptual framework to examine the bedside evaluation as a ritual. Although our focus is more on the physical examination than history-taking, we believe the latter to be a crucial component of the bedside evaluation and one that most often leads to diagnosis; however, it is the skilled examination of the body that we believe is most endan-
RITUALS ARE LEARNED THROUGH APPRENTICESHIP

During their clinical years, students are known as “clerks” or “subinterns,” and housestaff are known as “interns,” “trainees,” and “fellows”—terms that signify apprenticeship. If physicians-in-training are apprentices, then attending physicians are the masters. What students read in textbooks about history-taking and physical diagnosis leaves less of an impression on them than observation of their teachers. The master may put great emphasis on the bedside evaluation. Conversely, the master may not carry an ophthalmoscope or reflex hammer and may not seem keen to spend time at the bedside. By their actions or omissions—a form of the “hidden curriculum”—the master might suggest that hands-on care is or is not important (10). To help students and trainees learn the ritual and maintain its tradition, we need teachers who perform it well and convey its value. Perhaps this represents the most significant change in the nature of teaching medical students and residents in the past 2 decades: Less time at the bedside and less teaching and demonstration of the nuances of history-taking leads to—on the basis of the iterative hypothesis formed by the history—less time spent demonstrating applied examination techniques or seeking signs that confirm clinical suspicion.

There is satisfaction in mastering skills that can be used directly and daily and that are well-received by patients. Selling this “hands-on” expertise by teaching it may be an incentive for students to value internal medicine and primary care, 2 fields with particular focus on diagnosis (11). It is rewarding to witness the excitement of students when they first feel a spleen, see a palpmontal reflex, or learn that a finding during the bedside evaluation or a nuanced point in the history predicts what echocardiography later confirms or renders additional tests unnecessary. It changes the bedside evaluation and its teaching from a chore in which neither teacher nor learner has faith into a ritual in which they both take pride. Most important, it keeps the actual patient, as opposed to the iPatient, at the center of attention.

RITUALS HAVE UNIQUE TERMINOLOGY

The apprentice must also learn to translate observations into the language of medicine. When overheard by the patient, such terms as “fremitus,” “tenderness,” or “dullness” may cause anxiety, but they also are an important component of the ritual.

Latin-derived terms have historic associations of religious sacrament, political power, and academic exclusivity. For the patient, such words can deepen and dignify the mystery of their condition and treatment, but they can also create fear. Nevertheless, the curious poetry and vivid metaphors of power (“canon a waves” or “saber tibia”), wholeness, and impairment (“cracked-pot skull”) of fruits (“strawberry tongue” or “peau-d’orange”), as well as the many eponyms that offer history lessons (Pott’s disease, Kernig’s sign, Osler’s nodes, or Courvoisier’s law) are part of the delight and romance of medicine. The words reported by the apprentice or pronounced by the teacher are part of the ritual.

SPECIAL SETTINGS AND GARMENTS IN RITUALS

Like many rituals, the bedside evaluation often takes place in a private, specially furnished space, curtained off from others when needed. In the office setting, the physician may have a chair and writing platform, whereas the examination table is often a specialized piece of furnishing that can be adapted to place the patient in different positions. The physician wears a symbolic white coat, whereas the patient strips and dons a status-neutralizing gown (12) that signals a transition to a liminal state—a professor, a police officer, or a homemaker is transformed into a patient. The process can be dehumanizing if done poorly, but when done well, it can signal the beginning of the transition from illness to wellness. Indeed, the willingness to disrobe and allow touch—markers of vulnerability—indicate the patient’s acceptance that this ritual is important for the transfer of knowledge. A patient who has disregarded could feel shortchanged if the doctor’s examination feels like an afterthought, an abbreviated or perfunctory component of the clinical encounter. When done well, the bedside evaluation helps to preserve person-ality—both the embodied identity of the patient and their humanity—and it validates the patient’s complaint by focusing attention on the soma. In contrast, imaging and laboratory tests strip away external markers of personhood. Patients who chance to see their own imaging studies see little that is recognizable as “personal self” in computed tomography scans or magnetic resonance imaging.

TRANSFORMATION

The patient has a crucial and active role in the bedside ritual. By giving permission to be examined, the patient affirms the physician’s connection with and commitment to the patient—a transformation of both roles is occurring (12–15). The patient accords authority to the physician, but it is a gift of authority that many physicians take for granted. The years of study and a busy practice may get in the physician’s way of seeing the therapeutic authority from a patient’s standpoint. Conversely, the patient’s cultural background might contradict or supersede the authority the physician has presumed (16). The inherent
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power imbalance in the examination clearly has the potential to harm (14). Although the presence of a chaperone, parent, or nurse is an attempt to address these issues, the evaluation can still feel like a violation if not done gently, with careful attention to draping, patient modesty, and comfort. In certain cultures, the ritual could be viewed as a serious breach of trust.

When competently and attentively performed, the transformation accomplished by the ritual is the revelation of hidden knowledge, such as the ominous discovery of a mass, or the recognition that a “bump” that caused the patient anxiety was simply the xiphoid process. However, we believe that when a sick patient is examined with skill, it goes a long way in earning trust and authority. It may affirm the personal commitment between doctor and patient at a deeper level—the unspoken, “I will always be with you. I will not let you suffer” (13). In a subtle and most remarkable symmetry, that which is hidden on both sides is revealed and exchanged in the transaction; the ritual is as important and necessary to the physician as it is to the patient.

The ritual is imperfectly understood by most patients. The very mystery of the ritual may lend it potency. If done well, it symbolically conveys to the patient that he or she has received the full attention of the examiner. Embracing the ritual or “magical” aspects of the bedside evaluation does not diminish the scientific approach (15). However, the empirical mode of science is compromised if things are done clumsily. To quote Osler, “Remember, however, that every patient upon whom you wait will examine you critically and form an estimate of you by the way in which you conduct yourself at the bedside. Skill and nicety in manipulation, whether in the simple act of feeling the pulse or in the performance of any minor operation will do more towards establishing confidence in you, than a string of Diplomas, or the reputation of extensive hospital experience” (17).

**Biological Changes and the Bedside Evaluation**

Recent understanding of the placebo effect has shown that context, ritual, setting, and tone of voice of the examiner induce psychobiological events that produce measurable change in levels of neurotransmitters (18, 19). Fabrizio Benedetti, a leading investigator in this field, argues that the placebo effect “is basically a psychosocial context effect” and that “different social stimuli, such as words and rituals of the therapeutic act, may change the chemistry and circuitry of the patient’s brain” (19). Moreover, “placebo effects can exist in clinical practice, even if no placebo is given” (20). We find this a useful pedagogic tool for students to grasp: Patients have an expectation that their doctor will examine them in a skilled, respectful, and ritualized fashion. If the expectation is fulfilled, it brings about a positive therapeutic effect. If it is not, it might have a nocebo (unpleasant or harmful) effect. These research findings are very preliminary and do not actually link neurobiological changes to patient outcomes, but they do suggest the timeliness of further studies of ritual function involving social scientists, ethnographers, neurobiologists, and clinicians. By learning more about the therapeutic importance of the physician’s “style” or ritual and studying outcomes, including patient satisfaction and adherence, we may be able to understand and amplify the benefits of our therapies.

**Conclusions**

In teaching history and physical diagnostic skills to our housestaff (18), we not only emphasize technique and model use of interviewing techniques and tools, such as reflex hammers and ophthalmoscopes, but we are also signaling that a skillful bedside evaluation is an important ritual. We stand at a critical juncture in the preservation of the bedside evaluation, and the argument for preserving these skills is multileveled. First, skillful bedside evaluation allows efficient gathering of diagnostic information. We are all aware of incidents when a poor history or a sloppy physical examination led to patients being unnecessarily subjected to radiation and a delay in diagnosis or an unnecessary procedure. But beyond this, the ritualistic features of the bedside evaluation deepen engagement with the patient. Furthermore, learning and performing skillful bedside examination can also bring about a change in the attitude of the young physician and give added satisfaction to experienced physicians who have a sense of expanding their repertoire as clinicians.

The ritual is a key part of the commitment to medicine, and in carrying it out, personal creativity and skill can find play in a form that accomplishes essential gathering of information, while conveying a symbolic centering of attention on the body as a locus of personhood as well as disease. If the period of apprenticeship is shortened or if capable instructors are no longer available to teach, and if no practical use is made of these skills, then it will die out. In addition to being an essential diagnostic tool, the bedside evaluation is a ritual worthy of teaching, testing, refining, and preserving.

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In Defense of the Personal Statement

As the director of an internal medicine residency program, I read hundreds of personal statements every year. I know many program directors who find them irrelevant at best, and I confess I can’t blame them. These statements usually follow one of three scripts: The candidates relay a medical catastrophe that afflicted them or their family. Curiosity is piqued. They indulge their curiosity by poring over endless tomes of biologic sciences and end up in medical school. Or, they know that they’ve wanted to be a doctor since conception. They were always exceptionally skilled in the sciences but really wanted to help people. Medical school was the natural conclusion. Or, lastly, the curious case of Mr. X, who tells me a great deal about the unfortunate patient but surprisingly little about the candidate. All candidates then have some sort of revelation during their internal medicine clerkship, and that is how their applications arrived on my computer screen.

I hate them all. Not the candidates, but their personal statements. Because there’s really very little that’s personal about them. The major thing they’ve told me about themselves is that they are very much like 90% of the other candidates for my program, or that they’ve engaged the services of whatever essay mill produces such stultifying prose. I’m not sure which is worse.

I’ve felt this way ever since I had to write my own personal statements for college, medical school, and residency applications. I felt that the personal statement was a great opportunity to tell the programs how I differed from the other candidates. My scores may not have been the best, and my grades wouldn’t bowl anyone over, but my personal statement—that was an opportunity to convince the program that they should still give me a look. The one that I remember most vividly is the one I wrote for my internal medicine residency application. I wrote about growing up on a South Dakota farm in the mid-1970s, in the era before genetically modified soybeans were bred to resist some of the most potent herbicides known to man. Back then, we got rid of weeds the old-fashioned way—by hand. As one of four children, I was expected to wake up at dawn in the summer months and join the rest of the kids in our more than 100-acre soybean field, slowly trudging up and down each and every row attacking any weed we encountered, with either my hands or the blunt kitchen knife I carried. Some of the weeds were taller than I was and seemed to attract multitudes of stinging insects that I am convinced have yet to be catalogued. After 5 hours of this, we would all be glazed with some combination of sweat, dirt, and mangled insect corpses. We weren’t paid for this. Our reward was a possible trip to the public swimming pool that afternoon. (We were, by the way, probably the driving force behind why people are required to shower before entering the water.) I winced a little as I mailed my statement, hoping that I hadn’t portrayed myself as too much of a hayseed, while at the same time knowing that it was a large part of my story. This was the truth and the essence of me in 500 words or less.

The response was overwhelming. Every single interviewer asked me about it, and it usually led to a spirited and satisfying conversation. One flat-out told me that he thought I was lying, and I spent the greater part of the interview convincing him otherwise. Another looked at me almost thankfully and told me it was one of the best personal statements he’d ever read.

Now that I’m a program director, I think I know why. The overwhelming majority of personal statements are excruciatingly boring. It seems that our standardization of the medical school curriculum has led to a generation of physicians who feel the need to be standardized people as well, even when making statements that are by their very title intended to be personal.

Give me the personal statement that describes cowering under the kitchen table during a raging kitchen fire. Give me the one that describes the conflicting feelings of having an oppositional soldier in the cross hairs, knowing that one day you may be the very medic assigned to help him. I want to hear from the candidate who appreciates the fibers of alpaca wool, the benefits of painting with oils rather than acrylics, the one who won the world clogging championships at the age of 12, or the one who worked hard at becoming a varsity football player but ended up handing out towels on the bench. These are the personal statements that convey appreciation of fear, conflicted emotions, beauty, success, and failure. These are the ones that demonstrate a feature that is still key to being a doctor: humanity. How else are we to know about this side of our candidates if not for their personal statements? And don’t even think about suggesting that we rely on the letters of recommendation: I have read far too many that are written for different individuals but are word for word identical. They’re frequently much worse than the personal statement, and for that, shame on us.

Our medical students need to be encouraged to bring themselves to life in their personal statements. They need to find something—anything—that describes them as an individual. Encourage them to share their love of dogs, their fear of clowns, their culinary successes, and their camping nightmares. Tell them to present themselves as someone swimming in this ocean of life and not the buoy bobbing on top of it. For the sake of program directors everywhere, I beg this of you.

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Remarkably Wise

There is no more difficult art to acquire than the art of observation, and for some men it is quite as difficult to record an observation in brief and plain language.

Sir William Osler

As one walks through the brightly lit, drably painted corridors of a typical US teaching hospital around 10 o’clock in the morning on any day of the week, any week of the year, one finds himself or herself tossed about in a tumultuous sea of the English language. Most buffeting winds come from senior residents, drifting from within their white coats as they present cases to senior physicians:

“Cardiovascular-wise, examination was unremarkable.”

“The patient is in no acute distress, vitals within normal limits.”

As one wanders further down the corridor, he or she realizes that after absorbing this windstorm, even for days, the gales simply are swirling about the ward, unable to guide even the swiftest of ships to a diagnostic or therapeutic shore. Not to be outdone, however, the senior residents’ junior colleagues join the fray:

“Neuro exam was grossly intact.”

The most useful and, historically, valued portion of the day on an academic medical service is teaching rounds: a time where students and house staff present the subjective and objective data about their patients and begin to learn what pieces of those data matter in clinical care. Students and house staff then are to sail boldly into the world of differential diagnosis and diagnostic testing and, near the end of residency, begin to see the exciting new land of the art of the practice of medicine. In order to sail toward this shore, however, those who guide the learners’ ships must be able to hear the grains of importance in each presentation, and the more remarkable and within-normal-limits that are present in a presentation, the more dilute the important information.

With each passing year the objective portion of our presentations has more digits and fewer words—we painstakingly report MAPs and CVPs and PIPs and PAWPs and UOPs and PEEPps with alacrity and ensure that we teach our medical students to do the same, if only by default, complimenting them on thoroughness when they report every numerical value to the greatest possible number of significant digits that can fit on their folded sheet of bond paper printed with boxes that simply must be filled in. However, this painstaking, methodical roll call of the day’s “numbers” quickly gives way to a cursory, truly unremarkable recitation of one’s likely even more unremarkable physical examination. This is where we encourage our medical students to join the dispassionate drone from inside their short white coats:

“Mr Jones is a 54-year-old male . . .

Male what? Ferret? Dolphin? We teach our learners to shy away from the seemingly more intimate (but accurate and humanizing) terms man and woman. Our navigation down the ward continues:

“HEENT exam: P-E-R-R-L-A. [Pause to ensure he or she gets credit for checking accommodation.] E-O-M-I. O-P clear . . . ”

“Lungs are unremarkable.”

This is where a great injustice is done to those who developed our art, our patients, and those whom we teach. The word remarkable is reserved in common English dialogue for something out of the ordinary, something exquisite, something grand—and its medical antonym, unremarkable, simply isn’t spoken outside places where people in white coats gather in groups at 10 o’clock in the morning, every day of the week, every week of the year. Unremarkable can mean normal; it can also mean “I didn’t look” or, commonly, “I don’t think it’s important.” The meanings of remarkable and unremarkable are further diluted by their frequency; one of us counted them used 17 times in a single presentation.

“CBC was remarkable for a hemoglobin of 12.3.”

Was it really? The pervasiveness of the word remarkable and its antonym in the halls of medicine has allowed us to avoid thought in our preparation of presentations and focus on the “numbers.” Our calling as physicians is to tell our patients’ stories, stories that should float with descriptive language befitting their importance. Great clinicians slow down when they get to their physical examination:

“She was a woman who appeared tired, wearing a baseball cap sideways on her head, jaundiced, with a noted head bob” is strongly contrasted with “chronically ill, NAD.”

“Abdomen: distended, normoactive bowel sounds” is contrasted with “He has bulging flanks, a caput medusa, and a floating liver palpable 5 centimeters below the right costal margin” as two ways of relaying the examination of a cirrhotic patient. The second way, however, gives artfulness to the presentation that makes the listener pause and think about why those findings are important. As we move toward patient-centered rounding, the latter prose is more likely to engage a patient in the discussion and give her confidence that despite the seemingly endless waves of num-

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bers, our interaction with her is what matters the most. Letting the story of our interactions with our patients unfold like a well-spun sailor’s yarn keeps listeners engaged and excited about what might come next.

The demise of the dictation and rise of the “copy-forward” electronic daily note lends itself to the use of acronyms and abbreviations and discourages the use of artful, descriptive language to describe the findings of a truly wonderful privilege—the physical examination of our patients. Succussion splashes and skodaic resonance have been traded for unremarkable and CTAB, bicycle-pump or blowing murmurs have been replaced by II/VI SEMs, and we organize our presentations casually by adding “-wise” to the end of any word.

In stark contrast, those known for teaching medicine get a twinkle in their eye when telling you about a patient and, even though that patient’s story is, according to Webster’s definition, truly remarkable, he or she will tell you in a way that makes postcall interns awaken and medical students stop obsessing about being evaluated for a brief minute to listen to this story. One is no longer lost in a sea of numbers but instead can navigate a course to the shore of elegant diagnoses and therapies. We have the great privilege of telling our patients’ stories—stories they relay to us with their words, with their crunching hearts, their splashing pleura, and their umbilical veins that fill from above to below or vice-versa. These stories should not be bookmarked by the grammatically inept “ID-wise” or “neuro-wise”—instead they should be told in a way that relays our reverence for and joy in our art...and for the intended use of the English language.

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Never suffer an exception to occur till the new habit is securely rooted in your life. Each lapse is like the letting fall of a ball of string which one is carefully winding up, a single slip undoes more than a great many turns will wind again. Continuity of training is the great means of making the nervous system act infallible right.

—William James (1842-1910)