Veterinary Health Center
AT KANSAS STATE UNIVERSITY

Veterinary Health Center
MANHATTAN, KANSAS

OFFICIAL PROTOCOL

SMALL ANIMAL INTERNAL MEDICINE

INTRODUCTION

The handbook is intended to provide the basics for success on the Small Animal Internal Medicine service, including a description of the preferred method for presenting a case in rounds and for writing a SOAP. As always, our support staff and clinicians will be happy to answer any questions you may have regarding hospital protocols. However, we do ask that you familiarize yourself with this handbook before you begin your rotation. Any comments on how to improve the medicine rotation or this handout are appreciated.

MEDICINE ROUNDS

Medicine rounds are held Monday - Thursday at 8:30 A.M., and Friday at 9:00 A.M. in the Small Animal Conference Room or other designated meeting place. In morning rounds, individual cases are presented by the students for group discussion. The presentations should be concise. Discussion may be short or lengthy. Case presentations should be according to the Problem Oriented Approach and should reflect your most recent SOAP. If the case is being presented for the first time, begin with the signalment and a brief review of the history, physical examination findings and your initial Problem List. For animals that have been hospitalized for more than a day, begin your presentation with the signalment, current problem list, results of any new diagnostic tests, therapy and response over the past 24 hours, and plans for the next 24 hours. See the discussions on “Presenting a Case” and the “Problem Oriented Medical Record”. You should be familiar with all cases on the service and be willing and able to actively participate in case discussions.

Afternoon topic rounds will be held as case load permits at 2:00 or 3:00 P.M. in the conference room. Topics for rounds discussions are included in your handbook. The discussion will be led by the attending clinician or resident with participation by all.

Please always check with your clinician(s) before leaving for the day.

ATTIRE

You are in a professional degree program and should be dressed in a manner that befits this status. It is understandably difficult for clients to have confidence in a doctor who is not clean or presents a

disheveled appearance. Lab coats are required and should be neat and clean. Although your name is on your lab coat, it is recommended that name badges be carried with you (and displayed if possible) at all times. Purple scrubs are acceptable attire, so long as a white lab coat is worn over them.

GRADING

Grades and evaluations will be posted on One45 within 3 weeks of the end of the rotation. These are the consensus of all clinicians involved with the group during your rotation. Students failing to meet minimum standards will receive written notification midway through the rotation and will discuss their performance with the course coordinator. A student may still receive a grade of D or F regardless of whether a mid-rotation notification was given, if the performance in the final week warrants such action. Students are welcome, but not required, to provide a self-assessment of their rotation performance to the Section Head by the last day of the rotation if they would like to highlight aspects of their performance they feel may have been overlooked.

ABSENCES

Absences due to illness are unavoidable and unpredictable. If you have a contagious febrile illness (e.g., influenza), please stay home until you are no longer contagious (24 hours after the fever breaks). Please use your best judgment with the common cold or similar.

Requests for personal leave will be considered on a first come, first serve basis. No more than two students at any time can take time out for such activities. It is your responsibility to obtain leave slips and emergency/ICU schedule change forms from the departmental office. Leave slips must be signed by the attending Internal Medicine clinician.

Unless circumstances are exceptional, missed days (>2 days) must be made up after the end of the rotation. An incomplete grade will be given until this has been done.

RECEIVING

There are 2 groups of medicine students. One group receives M, W, F; the other group receives T, Th. The groups will rotate on a weekly basis. Students need to coordinate who will receive transfers on Saturday mornings and write this schedule on the white board in Ward 1. Please make sure you sign up for cases only on the day for which you are scheduled to receive, unless otherwise instructed by a clinician. Students should sign up for cases prior to morning rounds or the prior evening. If you are not signed up for a case, you still must be available for any add-ons or emergencies. In most cases, the Small Animal Desk personnel will page the student signed up for the case when the client arrives; please answer that page immediately. Clients should not have to wait. If there is no student signed up for a case, or the case has been added late, the front desk may need to page overhead for a student. Please listen for these pages. Explain to the client who you are and how the appointment will proceed. Do not assume that the owner understands how a teaching hospital works.

If the patient has been seen here previously or records have been sent by the referring veterinarian, please familiarize yourself with the case prior to the scheduled appointment. If you are uncertain as to the reason for a recheck appointment, or how to proceed with the recheck, ask the Ward Nurse or the clinician in charge of the case.

If required, any policy instituted by the Hospital Director in response to a pandemic or public health crisis takes precedence over any stated policy for receiving/attire/hospitalization/absence policy.

MINIMUM DATA BASE

During your initial contact with the client you will obtain a history and perform a physical examination of the patient. Record the history and physical examination findings on the appropriate forms provided with the medical record. Important information that should be obtained from the history include: the reason for the visit (chief complaint(s)); the nature of the chief complaint(s) (e.g., onset, severity, duration, response to previous therapy); and results of prior diagnostics. Next you will perform a physical examination. It is helpful to develop a consistent routine that will prevent you from forgetting part of the physical examination. It is important that all animals be weighed and the weight recorded. We schedule appointments every 30 minutes so you should not take more than 15-20 minutes in the examination room. Please make every effort to remain on schedule. Taking an excessive amount of time in the exam room exhausts the patient and the client. Do the best job you can in the allotted time and move on to the next step, which is establishing a problem list and formulating your initial plan. Please let your clinician know if you are having difficulty keeping on schedule--we may have suggestions on how to improve your efficiency. Do not attempt to examine aggressive animals without consultation from your clinicians!

THE PROBLEM LIST

A problem is an anomaly (chief complaint(s), physical examination findings, laboratory finding, etc…). Some problems are deemed important (e.g., polyuria/polydipsia, hypercalcemia of 16 mg/dL) and necessitate a diagnostic and therapeutic plan to better define (e.g., lymphoma causing hypercalcemia) and treat. Some problems are not relevant to the chief complaint (s) (e.g., moderate gingivitis and dental calculus in a 12-year-old dog presenting for pollakiuria. These problems need to be initially noted, but the plan for these unimportant problems can be "inactivate". Problems can be "defined to a higher level of understanding", "combined", "resolved", or "inactivated". You will develop an initial working problem list after the history/physical examination, but will refine this list over the course of the visit/hospitalization.

THE INITIAL PLAN

After you have identified the current problems, assess each problem separately and create a plan for it. Your plan for each problem includes both a diagnostic and therapeutic component and is recorded next to the Working Problem List.

PRESENTING THE CASE TO THE CLINICIAN

Once you have obtained your history and physical examination, and formulated a problem list, differential list, and plan, you should page the clinician that is signed up for that case. The presentation should be done as you would present a case in rounds. Begin with the signalment and the problem for which the animal was presented. Next, go over the pertinent facts in the history and PE findings. Then present your problem list, with differentials for each, and your plan. You and the clinician will discuss these briefly, then return to the examination room. Again, we do not want the clients to have to wait too long to see a clinician. During this stage of the visit, the clinician may glean new details or refine the history. This should be recorded (by the student or clinician) as well as any new or differently interpreted PE findings. The "Plan" can then be modified as needed. For patients that will be hospitalized, an estimate form will be filled out, usually by the clinician. Prior to taking the patient to the back or leaving the room, verify a preferred contact phone number for the client (if the clinician has not done so).

You may find it helpful to put a patient sticker on a 3x5 card for your files to keep track of the patients that you see. It may also be helpful to write any pending tests on these cards to help you and your clinician remember when a client needs to be notified. Please enter appropriate information in

Client Communications (VetStar) any time a client or referring veterinarian is contacted. Documenting communication is an important part of the legal medical record.

OUTPATIENTS

Throughout the day, update the client with the status of diagnostics, especially when there are unexpected delays. Do not allow a client to leave with their pet without speaking to a clinician, unless asked to do so. If any tests are pending at discharge, make arrangements to contact the clients. Verify the telephone number. Once a test is finalized, discuss the results with the clinician and make a plan for contacting the client. Document all client communication in VetStar.

HOSPITALIZED CASES

Clients must be contacted daily, usually twice daily (or more)! This should include the morning after the patient is evaluated, during the day as test results become available and an update on the diagnosis or plan is revealed, and at the end of the day. Review the case with your clinician before calling a client. Good communication can prevent many problems. If there is ever a time you do not feel comfortable calling a client, please tell your attending clinician. In general, clinicians will speak to owners regarding important decisions, e.g. surgery, or deteriorating conditions.

Patients are hospitalized in Ward 1 (Internal Medicine) or Ward 2, which includes the runs, unless admitted to ICU. Complete a cage card and identification collar for all patients. Ward folders and all supplies required for hospitalizing patients are in Ward 1. The current record is placed in a purple ward folder, identified, and placed in the rack in Ward 1. The "old" record is placed in a yellow folder and kept in the designated area in the Ward. The record should always stay with the animal (ie. animal in ward, record in ward). Patients that are hospitalized in the Wards will have a clipboard with a treatment sheet that must be filled out and subsequently signed by the clinician.

For patients admitted to Ward 1, submit all necessary request forms (e.g., radiology), draw any samples needed (e.g., blood or urine) or start any tests that must be done on outpatients (e.g., ACTH stimulation test). Do these as efficiently as possible, then return to receiving if you have another client/patient that is waiting to be seen. Ask the nurses or classmates for help!

Patients admitted to ICU will require more time. A catheter must be placed, tests submitted, and ICU orders written before you return to receiving. The ICU nurses can help facilitate catheter placement and admission to ICU.

If your patient's condition requires attention so that you cannot take a scheduled appointment, please notify the attending clinician and Ward 1 nurse so that they can find someone else to take the appointment. Don't make a client wait—you can take a later case when you are available.

SOAP's are required twice daily on all hospitalized patients. Basic guidelines for writing a SOAP are included. SOAP's are best written in the evening to incorporate the results of any lab or diagnostic procedures that took place during the day. Progress notes should be updated throughout the day with an addendum.

All patients must have a physical exam, TPR, ICU orders, and all necessary samples submitted to the lab in the morning before rounds begin (ICU patients should have their orders up by 7 AM). If you anticipate problems with this schedule let your clinician know. Morning observations should be recorded in the record.

Treatments: You are responsible for all treatments on your patients with the exception of cases in ICU (you should attempt to perform as many treatments on your ICU patients as is practical). Treatments for patients in the Wards that are scheduled from 8:00 P.M. to 11:00 P.M. may be done by the student workers or students on emergency (if time permits) or by the SAM/PH student assigned to evening treatment duty. You must make arrangements to have these treatments done before you leave. There are treatment sheets that need to be filled out for each treatment and patient. See the Ward 1 Nurse to know where these should be posted. Treatment sheets become part of the permanent record. The medicine student that received that patient is ultimately responsible for completion of these treatments. Animals in ICU must have their treatment orders updated and completed by 7 A.M. every day (see ICU protocol).

Feeding: You are responsible for calculating a diet (include type, kcals, and amount) for each of your hospitalized patients. Unless otherwise essential (i.e. diabetic patients), patients should not be fed until after morning rounds. All food must be removed by 10 P.M. the evening before an animal is to be anesthetized (do NOT remove water). Patients that will have endoscopy the following day should not be fed the day prior to the procedure unless otherwise instructed by the clinician.

SUPPORT SERVICES

Please provide an accurate and concise history when submitting requests for radiology, histopathology, and necropsy. A good history is very important in interpreting a given test.

1. ANESTHESIA: You should request coverage from the anesthesia service as soon as you and the clinician feel that anesthesia may be required for a given procedure. Plan ahead and always request service if you feel that there is any possibility that anesthesia may be required. You can always cancel. Request forms are available in Ward 1. Completed requests should be turned in by 3:30 P.M. on the day before the case is to be anesthetized. If you anticipate needing anesthesia on the same day as your request, the attending clinician will need to contact the anesthesiologist on duty directly.
2. CLINICAL PATHOLOGY: All samples on patients being admitted should be submitted as soon as possible so that results may be obtained by the end of the day. Cut-off times for the Clinical Pathology Laboratory are outlined under “Laboratory Policy” in the Hospital Policies section of this handbook. All samples should be submitted with the appropriate clinical pathology form. Samples to be sent to an “outside” laboratory should be taken to Diagnostic Laboratory Receiving desk and will require a DLAB submission form and the form from the outside laboratory. All samples submitted to the lab should have a patient label attached.
3. CONSULTATION FROM OTHER SERVICES: You will need to complete a Consult Request form and have the attending clinician approve/sign it before seeking consultation. Prior to any consultation, you should first perform a physical examination and formulate a problem list and initial plan. Completed consultation requests are placed on the door to Ward 3 (Surgery), the Ophthalmology exam room, or given directly to the service.
4. PATHOLOGY: A brief, but accurate, summary of the case should be submitted with all pathology/necropsy requests. All requests must be reviewed and signed by the clinician. Check with your clinician regarding charges for necropsy.
5. DISPENSARY: Dispensary hours are from 8:00 A.M. - 5:30 P.M. Monday through Friday and 8:00 A.M. - 11:00 A.M. on some Saturdays. Prescriptions require the signature of the attending clinician on the case, especially when controlled substances are being prescribed.
6. RADIOLOGY: All requests for radiographs must be made on VetStar. Special procedures (those requiring anesthesia, nuclear medicine, CT, MRI) must be scheduled through the radiologist on duty at least one day in advance. Referral radiographs should be submitted with any requests for new radiographs for review by the radiologist.

7. TEST RESULTS: Test results from clinical pathology are available on-line. A medical record copy will be placed directly in the record by medical records personnel. Please leave this copy in the record - do no remove it. Sheets for compiling large amounts of laboratory data are in the cabinets in Ward 1 and are of great help in organizing your test results.

DISCHARGE PROCEDURES

1. BILLING SUMMARY: While writing your SOAP in the evening verify that any procedures/diagnostics performed that day have been added to the account on VetStar. This will enable you to give the client an accurate estimate of the charges. Nurses will also enter charges in VetStar, so be careful not to duplicate charges. Many charges, such as for endoscopy, radiology, and anesthesia should only be entered by the nurse.
2. DISCHARGE ORDERS: Discharge instructions should be prepared on VetStar (only with rare exception should they be hand-written on the Discharge Instructions form). Do not finalize discharge instructions until they have been reviewed by the Clinician. Discharges should be clearly written so the client can understand what was done and what they need to do at home. **See Procedures for Submission of Discharge Instructions, Appendix III.**
3. BEFORE THE CLIENT ARRIVES
    a. Have medication orders from the dispensary ready to go. All medications sent home with the client need to be properly labeled, check the labels to be sure they are accurate. Also, make sure written prescriptions for outside pharmacies are ready.
    b. For patients that have been hospitalized, a final audit is required. Work with the Ward Nurse to ensure all charges are entered, then the medical record needs to be approved by one of the approved auditors prior to discharge. There is a discharge checklist available at the Discharge desk that must be signed by the auditor.
    c. The patient should be **clean** and may need to be bathed before going home. Check with your clinician about bathing any animal. Hospitalized patients will not be charged for a bath at the time of discharge.
4. DISCHARGING THE PATIENT
    a. Unless otherwise directed by the attending clinician, you must be present at the time of discharge so that you may discuss what was done, review medications and give instructions regarding at-home care. Ask the clinician if he/she wishes to be present also. Do not discharge a pet without the clinician, unless expressly asked to do so.
    b. The order of discharge should be:
        i. The client pays the bill and receives any medications.
        ii. You and the clinician speak to the client. This should be done in an exam room to avoid congestion at the desk.
        iii. The patient is delivered to the client. You cannot expect clients to pay attention to your instructions if they are preoccupied in a joyful reunion with their pet. It is only good sense to speak to them first.

CASE SUMMARY

When you are transferring a case to a new student, a Case Summary Form should be completed and placed into the record. The summary should be concise.

GUIDELINES FOR CASE PRESENTATIONS IN MEDICINE ROUNDS

GOALS

1. Develop skills in case presentation. Throughout your career you will need to seek the advice of colleagues. They will need a clear, concise case summary if they are to help you.

2. Consideration and discussion of the medical aspects of each case for the education of all in attendance.

CASE PRESENTATION

1. Signalment: Age, sex, and breed
2. Chief complaint and pertinent history: This will be presented the first day the case is discussed in rounds. Your job is to summarize the case, not to narrate it. List the pertinent chief complaints and relevant history. If treatment was attempted elsewhere, summarize it.
3. Physical examination: List any abnormal findings. It is not necessary to list all normal findings.
4. Problem list: List all significant problems.
5. Rule outs: These are the disease processes (the most likely ones) which you have proposed as the cause of the problem being discussed. Make sure this list is pertinent to your case, i.e. a pyometra is not a differential for PU/PD in a male dog. Each problem mentioned should have a concise list of appropriate rule outs. It is on the basis of your rule outs that you justify your plan.
6. Plan: The plan consists of a Diagnostic and Therapeutic component.
    A. Diagnostic: Only those tests or procedures which you have justified with a problem and its rule out should be presented. Laboratory data should be presented with the absolute value and your assessment. All pertinent radiographs should be presented and the abnormalities pointed out.
    B. Therapeutic: Fluid therapy, drugs, etc. Values should be expressed in units, mgs, or mls per kg.
    C. Client education: Advice or suggestions concerning patient or environmental management, etc.

7. Diagnosis: THE GOAL OF CLINICAL MEDICINE IS NOT TO ARRIVE AT A DIAGNOSIS BUT RATHER TO EFFECTIVELY DEAL WITH THE PATIENT'S PROBLEMS. A definitive diagnosis is not always reached. If you have arrived at one, present it at this time.

In summary, the Problem List is the center of the case presentation, just as it is the center of case management.

Example: Tiny is a 1 year old female spayed Yorkshire terrier who is presented for episodes of hypoglycemia. She has had 5-6 episodes over the last 6 months, which have increased in frequency. Her signs during these episodes include weakness, incoordination, blindness, progressing to seizures. She has received in hospital therapy by the RDVM consisting of intravenous fluids and dextrose with good response. At home she is being fed every 4 hours, but the episodes are still occurring. Blood tests have been done and revealed a mildly low BUN and mildly low albumin. Her problems include episodic hypoglycemia, hypoalbuminemia, and decreased BUN. The differentials include portosystemic shunt, microvascular dysplasia, poor hepatic gluconeogenesis, other severe hepatic dysfunction (cirrhosis, toxic necrosis). Our plan is to repeat CBC, chem profile, obtain urinalysis, fasting and postprandial bile acids, and abdominal radiographs to start. An abdominal ultrasound and nuclear scintigraphy may be done in the future.

THE PROBLEM ORIENTED MEDICAL RECORD: Definitions & Guidelines

The problem oriented medical record was developed in the late 1960's in an effort to improve the logic of patient management and enhance communication through the medical record. The idea behind this approach is to separately record and analyze the patient's major problems to help logically process and catalog patient information and to provide for a more thorough and methodical process of diagnosis and treatment.

A patient's medical record is a legal document that chronicles the care of the patient during hospitalization. It serves as a tool for communication among all personnel involved in caring for the patient and documents the patient's medical records in a standard, problem-oriented fashion. Please use these notes as a guide and feel free to ask your clinicians for further direction if necessary.

The "Problem"

1. A problem is defined as any abnormal finding obtained through history-taking, physical examination, or testing procedures that requires medical or surgical attention or impacts a patient's quality of life. Procedures are not listed as problems unless complications arise (e.g. severe hemorrhage from a biopsy site, dehiscence of a sutured wound).
2. Problems are defined to the highest current level of understanding, and are **redefined** as additional information dictates. For examples, "diarrhea" may be later redefined as "parvoviral enteritis" and "hyperglycemia" may be later redefined as "diabetes mellitus".
3. Both understating and overstating problems are detrimental to the diagnostic process.
    a. **Understating** a problem impedes development of an appropriate diagnostic plan. For example, "respiratory problem" is broad and vague, but "expiratory dyspnea" narrows the differentials and leads to appropriate diagnostic testing.
    b. **Overstating** or inaccurately identifying a problem leads to tunnel vision, inappropriate or excessive diagnostics and missed diagnoses. For example, "fluid-filled abdomen" instead of "abdominal distension" might lead to unnecessary abdominocentesis on a dog with hyperadrenocorticism or mismanagement and delayed treatment of a pyometra.

4. Possible fates of problems: Problems that are related may be **combined** and **updated** or **redefined**. For example: "elevated BUN" and "small, irregular kidneys" may be later combined and the problem updated to "chronic renal failure". Problems may sometimes be **inactivated** if they are incurable or are not significant to the major problems at hand. For example, "grade II luxating patellas" in a poodle with congestive heart failure, or "mild periodontal disease" in a cat with a fibrosarcoma. Ideally, medical problems eventually are **resolved**.

The "Working Problem List"

The working problem list is a tool for listing and tracking the patient's problems during a given hospitalization. It should be the first page of every patient's record. The working problem list is where you redefine, resolve, combine and inactivate problems. It serves as a table of contents for your SOAPs.

The "Master Problem List"

The master problem list serves as a table of contents for the entire medical record. It is an active and historic account of all the problems that the patient has now and has had in the past and is an official part of the medical record. You should not add to or change the master problem list unless directed to do so by a clinician.

Case Summaries

A case summary should be written any time the care of a patient is transferred from one student to another, to assure continuity of medical care. This may occur at the end of a rotation, or in the case where a patient is transferred to another service for treatment. The case summary should be succinct, but should outline circumstances of patient presentation, current problems and ongoing therapies such that the student assuming primary care clearly understands the patient's history and requirements.

The "SOAP"
The SOAP is a method of integration of all findings and plans pertinent to a particular problem. Below are guidelines for writing patient SOAPs and examples of a problem SOAP.

SOAPs should be structured as follows:

Problem Number and Name

S: Historical information, patient's symptoms, subjectively evaluated changes (e.g., owner input, changes in patient's attitude or clinical condition, etc.)

O: Objective observations regarding problem - data you can see, palpate, hear, or measure (e.g., physical exam findings, clinicopathologic data, radiographic/ ultrasonographic findings, endoscopic observations, etc.).

A: Assessment of problem to this point by assimilation of data in S and O (e.g., interpretation of data above relative to this problem, ranked differential diagnoses for this problem, justification of rankings and plans, patient progress, prognosis, etc.).

P: Diagnostic, therapeutic and client education plans

The depth and complexity of the SOAP required for a given problem will vary depending on the nature of the problem and whether it has already been addressed in the record. As a general rule, the first SOAP for a major problem should demonstrate a thorough understanding of the problem, all potential etiologies applicable to the particular patient, which etiologies are most likely, and rational diagnostic measures necessary to narrow your differential list.

Example SOAP for azotemia in a male cat presented with urethral obstruction (first SOAP)

Problem #1 Azotemia

S: Owner reported cat to be lethargic for 24 hours prior to presentation and said cat has vomited once in the last hour. Said cat has not been observed to eat or drink in 24 hours and has not produced any urine in the litterbox in the last day despite many straining attempts.

O: Cat appeared 7-8% dehydrated based on decreased skin turgor, tackiness of mucous membranes, and a capillary refill time of 2-3 seconds. Cat is laterally recumbent and bladder is 6-8 cm in diameter, hard and painful on palpation. No urine is expressed with gentle attempts. PCV: 38% TP: 8.2 g/dl BUN: 184 mg/dl Creatinine: 9.1 mg/dl Urine specific gravity: 1.023.

A: Azotemia can be pre-renal, renal, or post-renal in origin. Pre-renal azotemia occurs when renal perfusion and consequently GFR is decreased. The most common cause of pre-renal azotemia is dehydration. Post-renal azotemia occurs when urine cannot be normally excreted from the body. Possible causes of post-renal azotemia include obstruction of urine flow at or distal to the renal collecting system, or rupture of the urinary tract. Primary renal azotemia occurs when less than 25% of kidney function remains and can be caused by degenerative, neoplastic, toxic, infectious, inflammatory and ischemic processes. In this cat, we can rule in pre-renal and post-renal causes for the azotemia. Dehydration is present based on physical examination findings (decreased skin turgor and tacky mucous membranes) and elevated total protein, and is consistent with the owner's observation of total anorexia

and lack of water intake for 24 hours. In a normal cat that is dehydrated, we would expect the urine specific gravity to exceed 1.035-1.040. USG may be an unreliable indicator in this cat, however, because the urine in his bladder has been collecting for 24 hours or more. The turgidity of this cat's bladder and our inability to express urine from it support urethral obstruction and thus post-renal azotemia. We cannot yet rule out primary renal azotemia. To assess kidney function, we will need to monitor resolution of azotemia after pre- and postrenal azotemia have been resolved. If no primary renal damage has occurred as a result of this obstructive event, the cat's prognosis for full resolution of azotemia is excellent, because he has no record of previous renal disease.

P: Dx plan: Recheck BUN and creatinine tomorrow morning after rehydration and diuresis overnight. Tx plan: Maintain indwelling urinary catheter to insure patent urine outflow. Monitor fluid input compared with urine output to make sure that fluid therapy is adequate for rehydration and diuresis. Consider removing urinary catheter when azotemia is resolved. CE plan: Inform owner that the cat should be hospitalized in the ICU at least until azotemia resolves (1-3 days), and that we will be monitoring his progress with blood tests on a daily basis.

Two days later, the SOAP for this problem might look like this:

Problem #1 Azotemia

S: Cat is brighter and more active than yesterday. Drank readily and ate a small amount of canned Feline Maintenance this morning.

O: Hydration status normal. Frequent small amounts of urine produced in the litterbox overnight and bladder is small (2-3 cm diameter) and non-painful on palpation this morning. BUN: 21 mg/dl Creatinine: 1.8 mg/dl.

A: Azotemia is resolved. The original azotemia must have been due to a combination of pre-renal and post-renal causes and not due to intrinsic insufficiency of the kidneys.

P: Resolve problem on working problem list.

Learning Issues
In medical training, problem-specific learning issues may also be identified by you as you write your SOAP, or by your clinician when she or he reads your SOAP. For example, for the problem "cutaneous mast cell tumor," some examples of learning issues might include therapeutic options for this disease; the most appropriate therapy for this patient in particular; the relative advantages and disadvantages of each therapy; disease staging; useful prognostic indicators; cost; and prognosis. These issues can be addressed in the "A" portion of the problem SOAP.

General guidelines for medical records completion for Internal Medicine:

1. Each inpatient's chart must contain a minimum of two daily entries recording that patient's physical parameters, activities and progress for the day.
2. Significant procedures (biopsy, sedation or anesthesia, etc.) or changes in the patient's condition must be recorded as they occur during the day. These are recorded as "Addendum" and the time of the entry is noted.
3. The morning SOAP must be completed by 8:00 A.M. and the record must be available in the rack between 8:00 and 9:00 A.M. for clinician review.

4. Each identified problem must be SOAPed individually once a day.
5. The "S" and "O" portions should include data obtained since the last SOAP.
6. The "A" is the portion of the SOAP where you demonstrate your working knowledge of the patient's problem, and should reflect a refining of your understanding of the problem since the last SOAP. A change in assessment should be substantiated by information in the "S" and "O" sections. The "A" should include differentials for the problem ranked in order of likelihood for this patient, pathophysiologic information, and assessment of the patient's clinical progression or prognosis. The first "A" for a major problem may require time and research to complete thoroughly, and may be lengthy.
7. The P should contain diagnostic, therapeutic and client education plans, and may also relate to a problem's fate (e.g. redefining or inactivating a given problem).
8. Each progress note page must have a patient label.
9. Each entry must be dated, timed and signed.
10. If you make an error in the medical record, draw a single straight line through the error. The original text must remain visible, since this is a legal document.
11. Professional language and terminology should be used at all times in the medical record. Abbreviations should not be used with the exception of standard medical abbreviations.

CLINICIAN EVALUATIONS

At the end of every rotation, evaluation sheets for the clinicians on rotation will be distributed to all medicine students. It is very important that these evaluations be completed and returned. Student evaluations are extremely important in helping the faculty correct any potential problems and to identify various strengths and weaknesses with the teaching and clinical program. Your comments are essential and welcomed. All comments and evaluations are anonymous.

INTERNAL MEDICINE OBJECTIVES

By the end of the rotation the students should be able to:

1. Efficiently take a complete history and perform a physical examination on animals admitted to the medicine service.
2. Demonstrate working knowledge of the following medical problems, and be able to form a list of rule-outs and diagnostic, and/or therapeutic plans for:
    A. Chronic vomiting/regurgitation
    B. Chronic diarrhea (large and small bowel)
    C. Fever of unknown origin
    D. Polyuria/polydipsia
    E. Icterus
    F. Anemia/polycythemia
    G. Coagulopathy
    H. Cough
    I. Ascites
    J. Pleural effusion
    K. Episodic weakness
    L. Azotemia
    M. Hyperglycemia/hypoglycemia
    N. Hypercalcemia/hypocalcemia
    O. Hypoproteinemia
    P. Recognition and treatment of common arrhythmias
    Q. Acid/base, electrolyte abnormalities

R. Seizures
S. Hypertension/hypotension
T. Dyspnea/tachypnea
U. Fluid Therapy

3. The student should be able to demonstrate the ability to perform or an understanding of how to perform the following techniques:
    A. Venipuncture
    B. Cystocentesis
    C. Physical examination (including cardiac and neurological examination)
    D. Formulate a fluid plan and calculate appropriate dosages of medications.
    E. Formulate an appropriate dietary plan for a specific patient's needs.

EMERGENCY AND ICU DUTY ASSIGNMENTS

You will be responsible for SOAPing any emergency cases you admit until 8:00 A.M. the next working day, regardless of your rotation assignment. Cases will not be transferred to other services on Sundays or holidays, as per protocol.

The primary emergency student for each evening is on duty in-house for that particular evening. The backup emergency student is available by telephone for immediate response to a call from a clinician for additional personnel to assist with cases or an emergency.

Students will not switch assignments without written approval from the Departmental Office. The BACKUP on the list for any given day is also on CALL OVER THE NOON HOUR for walk in emergencies.