Small Animal Nursing Mentorship III



VM 20700

Criteria Logbook

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Clinical Mentorship Tasks

- 1. Video verification of required equipment and supplies
- 2. Perform fine needle aspiration
- 3. Perform skin scraping
- 4. Demonstrate closed chest CPR (simulation)
- 5. Perform Schirmer tear test
- 6. Perform fluorescein stain test
- 7. Perform tonometry
- 8. Hospitalized patient care, record keeping, and observation of a critical patient on IV fluids (calculate, monitor, and maintain)

ALL SKILLS MUST BE DEMONSTRATED ON LIVE ANIMALS (except task 4). Models or cadavers are not acceptable (except task 4).

Student Information

Contact Information

Questions regarding the overall Clinical Mentorship process should be directed to-

Jennifer Smith, BS, RVT, LATG

Clinical Mentorship Coordinator

jpope@purdue.edu

Questions regarding this mentorship (tasks, due dates, etc.) should be directed to the instructor for this mentorship course.

Animal Use Guidelines

The student shall abide by the following guidelines when performing mentorship tasks:

- 1. All animals used for demonstration of mentorship skills must be appropriated restrained by another person, for the safety of the patient and the student.
- 2. A mentorship task may be performed only once on a single animal.
- 3. A student may perform a maximum of ten (10) minimally invasive tasks (denoted by one asterisk) on a single animal within a 24-hour period.
- 4. A student may perform a maximum of three (3) moderately invasive tasks (denoted by two asterisks) on a single animal within a 24-hour period.
- 5. When combining tasks, a student may perform a maximum of five (5) minimally and three (3) moderately invasive tasks on a single animal within a 24-hour period.
- 6. Tasks denoted with no asterisks do not involve live animal use.

For example, a student might perform the following tasks on an animal in a single day-

- Restrain a dog in sternal recumbency*
- Restrain a dog in lateral recumbency*
- Restrain a dog for cephalic venipuncture*
- Restrain a dog for saphenous venipuncture*
- Restrain a dog for jugular venipuncture*
- Administer subcutaneous injection**
- Administer intramuscular injection**
- Intravenous cephalic injection canine**

Failure to comply with the Animal Use Guidelines may result in failure of the Clinical Mentorship.

Ensuring the welfare and safety of animals during handling and restraint is paramount. Proper techniques must be employed to minimize stress and prevent injury. This involves understanding the normal behavior of the animal, using humane methods, and applying the least amount of restraint necessary to achieve the desired outcome. Training in these techniques is essential for all personnel involved in animal care. The use of physical, mechanical, or pharmaceutical restraints should be carefully considered and monitored to ensure they are appropriate and effective.

With this in mind, the student is expected to utilize Fear Free® techniques for animal handling and restraint, as well as ensure that all patients are handled and restrained appropriately when they perform skills. Failure to do so will result in consequences ranging from loss of points or repeating the task, up to failure of the course and / or dismissal from the program.

By adhering to these principles, we can promote the health and well-being of animals while ensuring a safe environment for both patients and veterinary personnel.

Selecting the Clinical Mentorship Site – Facility Requirements

You must visit the Clinical Mentorship Site and determine if the following supplies and equipment are readily available to you for use during your Clinical Mentorship. The mentorship supervisor will verify the availability of required items by completing the Mentorship and Facility Requirement Agreement.

The veterinary care facility must be equipped with the following equipment:

- Clippers with a #40 blade
- Tonometer
- Diff-Quik stain set
- AMBU bag or other source for positive pressure ventilation (e.g. anesthesia machine)
- ECG monitor
- Emergency drugs (epinephrine, atropine)

In addition, the following disposable items must be available:

- Syringe assorted sizes
- Needles assorted sizes (22g for cystocentesis)
- Isopropyl alcohol
- Scalpel blades #10
- Mineral oil
- Schirmer tear test strips
- Topical ophthalmic anesthetic
- Eye wash or artificial tears
- Fluorescein strips or solution
- IV catheter and supplies for placement
- Fluids for parenteral administration
- IV fluid administration sets
- Microscope slides
- Exam gloves

Introduction to Essential Tasks and Criteria

Before starting each task-

- 1. Read the Goal, Description, Criteria, and Materials to be Submitted for Evaluation and Verification. Understand what is expected for each task.
- 2. Make sure that all equipment and supplies needed to complete the task are available. Pay particular attention to the details of what needs to be documented and submitted.
- 3. Make sure to obtain appropriate permissions where necessary. Please inform the facility's owner/manager of activities. A good relationship with the veterinarian in charge is key to having a positive Clinical Mentorship experience.

After performing each task-

- 1. Label all items submitted so that the materials submitted for evaluation and validation at Purdue are identified as the student's submission.
- 2. Label all videos posted to Brightspace with the task number.
- 3. Submit materials by the deadlines listed in the course syllabus

Introduction to Special Projects

Certain mentorships will have required projects to complete in addition to the required tasks. Written projects should be typed, and checked for correct grammar and spelling. Photos should be embedded into the related written documents.

Before starting each project-

- 1. Read through the project in its entirety. This will give you a description of the project and what is needed to complete it successfully.
- 2. Determine what materials, if any, need to be submitted for completion of the project.
- 3. Most projects will come with a list of questions/points that need to be addressed and included in the written document.
- 4. If video is required for a project, it should be noted on the videotape verbally that this is for the project and not another required task. Some projects may require a verbal narration of a student doing something. Each individual project will define if that is a necessary requirement for that project.

1. VIDEO VERIFICATION OF REQUIRED EQUIPMENT AND SUPPLIES

Goal: Ensure that the student will have access to all equipment and supplies necessary to complete the skills in this course.

Description: The student will provide a narrated video showing equipment and supplies specific to this mentorship, to verify that required items are available to them and adequate for completion of tasks in their facility.

Criteria:

- The student introduced the video and showed their face clearly.
- The student walked through the facility and showed the following clearly:
 - VNDL-provided sign informing clients that students may be involved in patient care (it should be displayed in an area that is visible to clients). (CRITICAL)
 - o Diff-Quik stain set, with appropriate secondary container labels on jars
 - o AMBU bag or other oxygen source and system for positive pressure ventilation
 - ECG monitor or machine with printout capability
 - Emergency drug box
 - Schirmer tear test strips
 - Fluorescein stain strips
 - o Tonometer

Number of Times Task Needs to be Successfully Performed: 1

- 1. Task Verification Form for Video Verification of Required Equipment and Supplies, signed by the Clinical Mentorship supervisor.
- 2. One video showing the student as they introduced themselves and walked through the facility, showing the listed items clearly. The student narrated the video live as they showed items.

Student Name:	
Supervisor Name:	RVT, CVT, LVT, LVMT, DVM, VMD
I verify that the student will have access to the i	items shown, for tasks in this course.
Signature of Clinical Mentorship Supervisor:	

2. FINE NEEDLE ASPIRATION

Goal: To collect a diagnostic quality cytology specimen using fine needle aspiration.

Description: The student will collect cells from a mass or lymph node using fine needle aspiration and properly prepare a slide for examination.

Criteria:

- The student selected an appropriate site for aspiration
- The student chose the correct needle size and syringe for the patient and site being aspirated (CRITICAL)
- The student prepared the site for aspiration and did not contaminate the site once it was prepped
- The student isolated the lesion/site and introduced the needle carefully with the syringe attached
- The student applied negative pressure, released negative pressure, redirected and applied negative pressure again without withdrawing the needle from the skin (CRITICAL)
- The student released negative pressure before withdrawing the needle from the lesion/site (CRITICAL)
- The student separated the needle from the syringe, drew air into the syringe, reattached the needle and expelled the contents onto clean microscope slides (CRITICAL)
- The student made appropriate smears, either push smears or squash preps, then stained the slides for viewing (CRITICAL)

2. FINE NEEDLE ASPIRATION (CONTINUED)

Number of Times Task Needs to be Successfully Performed: 1

- 1. Task verification form for Fine Needle Aspiration skill, signed by the clinical mentorship supervisor.
- 2. A video showing the student preparing the site, introducing the needle, aspirating the site, *and making and staining* the slide. The video should close up on the slide making so we can see the material on the slide prior to staining. The student will provide a narrative while videoing to describe the steps being performed.
- 3. One clear image of cells on the stained slide through the microscope. The slide will be from the videoed aspiration so we may compare technique to the contents on the slide.

Student Name:		
Supervisor Name:		RVT, CVT, LVT, LVMT, DVM, VMD
Patient Name:	Date:	
I verify that the student performed the	ese tasks under my supervision.	
Signature of Clinical Mentorshin Sune	rvisor:	

3. SKIN SCRAPING

Goal: To collect a specimen by skin scraping that is of diagnostic quality.

Description: The student will collect samples from a skin lesion by scraping and prepare a slide for examination for ectoparasites.

Criteria:

- The student placed a drop of mineral oil on the microscope slides being used
- The student moistened the scalpel blade with mineral oil
- The student selected an appropriate site/lesion for scraping
- The student pinched a fold of skin twice, at 90° angles, and scraped the surface until drops of capillary blood appeared (CRITICAL)
- The student transferred the material collected onto the glass slide with mineral oil (CRITICAL)

Number of Times Task Needs to be Successfully Performed: 1

- 1. Task Verification form for Skin Scraping skill, signed by the clinical mentorship supervisor.
- 2. One video showing the student preparing the slide, choosing the site, performing the scraping and making the slide. Close up views will be required to verify proper technique. The student will provide a narrative while videoing to describe the steps being performed.
- 3. One clear image of the slide through the microscope. The slide will be from the videoed scraping so we may compare technique to the contents on the slide.

Student Name:		
Supervisor Name:		RVT, CVT, LVT, LVMT, DVM, VMD
Patient Name:	Date:	
I verify that the student performed the	ese tasks under my supervision.	
Signature of Clinical Mentorship Supe	rvisor:	

4. CLOSED-CHEST CARDIOPULMONARY RESUSCITATION (CPR)

Goal: To demonstrate closed-chest CPR techniques as they would be performed on a dog requiring such measures, following the RECOVER guidelines.

Description: The student will demonstrate closed-chest CPR techniques on a stuffed animal, following RECOVER guidelines as both basic life support (BLS) rescuers and an advanced life support (ALS) rescuer. The student will demonstrate BLS Rescuer 1 and 2 separately.

*Note: The student will demonstrate assuming the patient is a 25 pound dog

Criteria:

• Basic Life Support Rescuer 1

- The student simulated checking the patient for respiration and responsiveness (CRITICAL)
- The student simulated performing chest compressions, using RECOVER technique for the patient, at the *proper rate* for a two-minute uninterrupted BLS cycle **(CRITICAL)**

• Basic Life Support Rescuer 2

- The student simulated placing an appropriate size endotracheal tube, using a laryngoscope, and securing it with gauze, in lateral recumbency (CRITICAL)
- The student simulated administration of oxygen using the *proper delivery system* (CRITICAL)
- The student simulated ventilation of the animal, using RECOVER technique, at the
 proper rate and pressure for a two-minute uninterrupted BLS cycle (CRITICAL)

Advanced Life Support Rescuer

- The student attached an ECG monitor to the patient and ETCO2 if available (CRITICAL)
- The student simulated intravenous catheter placement in lateral recumbency, and administration of fluids, verbally stating *flow rate* (CRITICAL)
- The student simulated the drawing and administration of emergency drugs as directed by the RECOVER CPR Emergency Drugs and Doses (see below) (CRITICAL)

4. CLOSED-CHEST CARDIOPULMONARY RESUSCITATION (CPR) (CONTINUED)

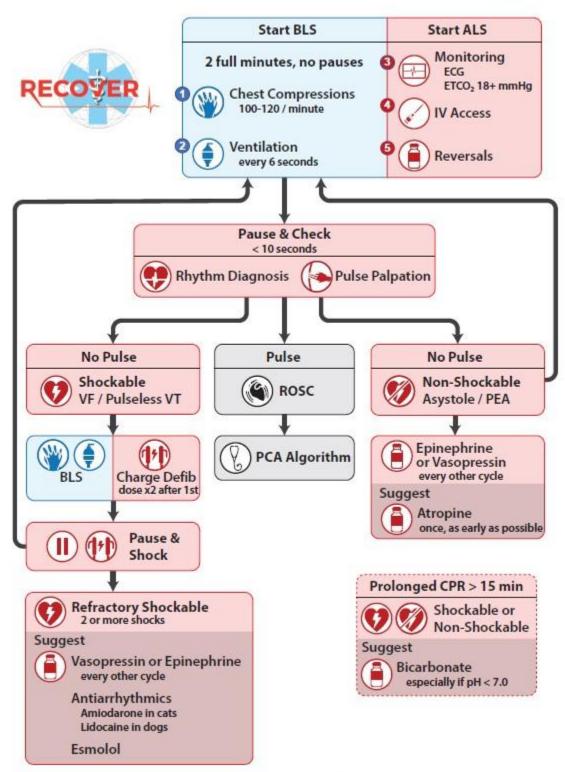
Number of Times Task Needs to be Successfully Performed: 1 (stuffed dog)

- 1. Since this is a simulation/demonstration there is no Task Verification Form to submit.
- 2. A video showing the student performing the simulated techniques following the RECOVER guidelines. The student should provide a DETAILED, live narrative while videoing to describe the steps being performed.
- 3. Written explanation of oxygen flow rate and delivery system for this patient (25 pounds).
- 4. Written explanation of appropriate ventilation and compression rates for this patient.

Student Name:	
Supervisor Name:	_ RVT, CVT, LVT, LVMT, DVM, VMC
I verify that the student performed these tasks under my supervision.	
Signature of Clinical Mentorship Supervisor:	

CPR Algorithm for Dogs and Cats





CPR Dosing Chart for Dogs and Cats



100	The state of	Weight (kg)	2.5	5	10	15	20	25	30	35	40	45	50
	DRUG	DOSE	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL
	Epinephrine (1:1000; 1mg/mL)	0.01 mg/kg	0.03	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5
Arrest	Vasopressin (20 U/mL)	0.8 U/kg	0.1	0.2	0.4	0.6	0.8	1	1.2	1.4	1.6	1.8	2
1	Atropine (0.4 - 0.54 mg/mL)	~ 0.05 mg/kg	0.25	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
nic	Amiodarone (50 mg/mL)	5 mg/kg	0.25	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Anti- Arrhythmic	Lidocaine (20 mg/mL)	2 mg/kg	0.25	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Arr	Esmolol* (10 mg/mL)	0.5 mg/kg	0.13	0.25	0.5	0.75	1	1.3	1.5	1.8	2	2.3	2.5
ial	Naloxone (0.4 mg/mL)	0.04 mg/kg	0.25	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Reversal	Flumazenil (0.1 mg/mL)	0.01 mg/kg	0.25	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
	Atipamezole (5 mg/mL)	100 μg/kg	0.06	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
hasic	External Defib (J)	4 - 6 J/kg	10 J	20 J	40 J	60 J	80 J	100 J	120 J	140 J	160 J	180 J	200 J
Monophasic Defibrillation	Internal Defib (J)	0.5 - 1 J/kg	2 J	3 J	5 J	8 J	10 J	15 J	15 J	20 J	20	20 J	25 J
*Adminis	ster esmolol 0.5 mg/kg IV er 3-5 minutes followed	Weight (kg)	2.5	5	10	15	20	25	30	35	40	45	50
by a CR	I at 50 mcg/kg/min												

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5. SCHIRMER TEAR TEST

Goal: To perform a Schirmer tear test.

Description: The student will perform a Schirmer tear test on a dog or cat and record results.

Criteria:

- The student prepared the test strip, folding at the notch while still in the package (CRITICAL)
- The student removed the strip from the package, touching only the end that is not placed on the eye (CRITICAL)
- The student assured the animal's head was restrained and positioned for the procedure (CRITICAL)
- The student inserted the strip between the lower eyelid and the cornea (CRITICAL)
- The student held the eyelids closed on the strip for 60 seconds, preventing the animal from rubbing the eye or removing the strip (CRITICAL)
- The student removed the strip from the eye and measured the length of the strip that was wet according to the manufacturer's instructions (CRITICAL)

Number of Times Task Needs to be Successfully Performed: 1 (both eyes)

- 1. Task Verification form for Schirmer Tear Test skill, signed by the clinical mentorship supervisor.
- 2. A video showing the student preparing the test strip, placement of the strip and assessment of the results. The student should announce the results on the video and state the normal range, and if the patient values are normal. Close up views will be required to verify proper technique. The student will provide a narrative while videoing to describe the steps being performed.

Student Name:		
Supervisor Name:		RVT, CVT, LVT, LVMT, DVM, VMD
Patient Name:	Date:	
I verify that the student performed these	tasks under my supervision.	
Signature of Clinical Mentorship Supervision	or:	

6. FLUORESCEIN STAIN TEST

Goal: To perform a fluorescein test.

Description: The student will perform a fluorescein stain test of the cornea of a dog or cat and record results.

Criteria:

- The student moistened the end of a sterile fluorescein stain strip using sterile eye wash or artificial tear solution (CRITICAL)
- The student assured the animal's head was restrained and positioned for the procedure (CRITICAL)
- The student elevated the upper eyelid
- The student placed the moistened tip of the strip on the bulbar conjunctiva for 1-2 seconds <u>or</u> further moistened the strip and allowed the stain to drip onto the cornea **(CRITICAL)**
- The student removed the strip (if touched to the eye) and allowed the animal to blink (CRITICAL)
- The student flushed the eye thoroughly with sterile eyewash (CRITICAL)
- The student examined the cornea in a partially darkened room (CRITICAL)

Number of Times Task Needs to be Successfully Performed: 1 (both eyes)

- 1. Task Verification form for Fluorescein Stain Test skill, signed by the Clinical mentorship supervisor.
- One video showing the student preparing the stain strip and placement of the strip. Close up views will be required to verify proper technique. The student will provide a narrative while videotaping to describe the steps being performed, including whether the result is normal.

Student Name:		
Supervisor Name:		RVT, CVT, LVT, LVMT, DVM, VMD
Patient Name:	Date:	
I verify that the student performed these to	asks under my supervision.	
Signature of Clinical Mentorship Superviso	or:	

7. TONOMETRY

Goal: To perform tonometry on the eyes of a dog or cat, using a Schiotz tonometer or Tonopen- or Tonovet-type instrument and record results.

Description: The student will perform tonometry and record results, noting abnormalities.

Criteria:

- The student instilled topical ophthalmic anesthetic drops in both eyes without touching the tip of the bottle to the eye (if required for instrument) (CRITICAL)
- The student checked/calibrated the tonometer for function and cleanliness before use (CRITICAL)
- The student waited 30-60 seconds after instilling drops before beginning the test
- The student assured the animal's head was restrained and positioned for the procedure (CRITICAL)
- The student placed the tonometer on the animal's cornea and noted the reading (CRITICAL)
- The student repeated the measurement two more times, and averaged the numbers obtained or reported the average reading calculated by the instrument (CRITICAL)
- If using a Schiotz, the student converted the tonometer readings

Number of Times Task Needs to be Successfully Performed: 1 (both eyes)

- 1. Task Verification form for Tonometry skill, signed by the Clinical Mentorship supervisor.
- 2. A video showing the student checking/calibrating the tonometer, instilling anesthetic drops, checking for correct patient positioning, placement of tonometer, repeating the measurement and averaging the results. Close up views will be required to verify proper technique. The student will provide a narrative while videoing to describe the steps being performed and verbally comment on the resulting numerical value for each eye, state the normal range, and state whether the value is normal or abnormal.
- 3. Written results for each eye with comment about whether results were normal

Student Name:		
Supervisor Name:		RVT, CVT, LVT, LVMT, DVM, VMD
Patient Name:	Date:	
I verify that the student performed the	se tasks under my supervision	
Signature of Clinical Mentorship Super	visor:	

8. HOSPITALIZED PATIENT CARE, RECORD KEEPING AND OBSERVATION OF A CRITICAL PATIENT ON IV FLUIDS (CALCULATE, MONITOR, AND MAINTAIN)

Goal: To provide nursing care for the hospitalized critical patient and calculate intravenous (IV) fluid administration rate, administer fluids and monitor fluid administration as well as the patient, while keeping detailed, accurate medical records of patient care and observations.

Description: The student will provide nursing care for hospitalized critical patients on IV fluids and keep detailed medical records for each case. The student will calculate IV fluid rates, see that the fluids are administered at the correct rate for that patient, record data and monitor the administration of the fluids and the patient receiving them.

Definition of a Critical Patient:

A patient that is required (by its medical condition) to be hospitalized for at least 8 hours. This patient must be receiving medical treatments or require other nursing care/observations at least hourly for at least an 8-hour period.

The student will provide care and record parameters for the patient for at least 8 hours (and at least 4 treatments) of its care.

Patient conditions that would be examples of critical are: unregulated diabetic, hit by car, pancreatitis, post-operative intensive care for lengthy surgery, renal failure, etc. If at any time you would like to know if a patient qualifies for this task, please contact the clinical coordinator or the mentorship instructor.

The minimum parameters that should be recorded at least every 4 hours are: TPR, check for vomiting, defecation, urination, mucous membrane color (MMC) and character, capillary refill time (CRT), attitude/mentation (i.e. BAR, QAR) and at least one medication.

8. HOSPITALIZED PATIENT CARE, RECORD KEEPING AND OBSERVATION OF A CRITICAL PATIENT ON IV FLUIDS (CALCULATE, MONITOR, AND MAINTAIN) (CONTINUED)

Criteria:

- The student chose and identified the patient by its signalment and ailment and recorded the information on the patient record (CRITICAL)
- The student chose a critical case based on the definition of a critical patient as outlined in this task, that required intravenous fluids for a minimum of 8 hours
- The student provided care for at least 8 hours of the patient's hospitalization
- The student initialed each entry to verify they performed the observation and treatment during the 8 hours (CRITICAL)
- The student calculated the flow rate for IV fluids for the patient (CRITICAL)
- The student set the flow rate to the desired setting to deliver the correct volume (CRITICAL)
- The student accurately recorded the volume of fluid actually administered hourly, as well as the total for the day so far, each hour (CRITICAL)
- The student maintained the correct rate of fluid administration (CRITICAL)
- The student monitored the patient, recorded all data and specifically observed the patient for parameters related to hydration status to include skin turgor, mucous membrane color and character and CRT, and auscultation of lungs, as well as checking the catheter site EACH TIME. (CRITICAL)
- The student recorded the monitoring and observation parameters accurately and chronologically (CRITICAL)
- The student recorded all treatments administered during the monitoring period accurately (CRITICAL)
- The student brought variations from normal parameters to the attention of the veterinarian in charge of the patient (CRITICAL)
- The student made detailed notes of observations and nursing care provided (CRITICAL)
- The record was clear, accurate and easy to follow

Number of Times Task Needs to be Successfully Performed: 2

- Task Verification Form for Hospitalized Critical Patient on IV Fluids Care skill, signed by the Clinical Mentorship supervisor.
- 2. Copies of flow sheets &/or charts from each patient, detailing instructions for fluid administration and patient monitoring as well as actual values and observations recorded by the student. Patient signalment and medical condition(s) should be identified on these pages. The following record may be used, or one used by the practice, as long as all required data is included on the record. If you use a flow sheet, detailed nursing notes should be included. The records will need to span at least 8 hours and it must be clearly identified (highlighted, initialed) where the student did the nursing care, treatments, and monitoring.
- 3. Videos showing the student performing monitoring duties on one patient receiving IV fluids, including maintaining the correct rate of administration. The videos should clearly show the fluid rate being given, set up of the fluid pump or setting the drip rate (one video), and should show hourly checks for four hours (four videos), demonstrating correct fluid volume administration as well as checking all patient parameters related to fluid therapy listed above. The student will provide a live narrative while videoing to describe the steps being performed (voice over not acceptable).
- 4. Written calculations of fluid rates for each patient documented.

Student Name:		
Supervisor Name:	R	VT, CVT, LVT, LVMT, DVM, VMD
Patient Name:	Date:	
Patient Name:	Date:	
I verify that the student performed the	se tasks under my supervision.	
Signature of Clinical Mentorship Supe	rvisor:	

CLIENT			PATIENT HOSPITALIZATION FORM / FLOW SHEET									CPR. YESNO							CAGE NUMBER DR								
PET				1	DATE I	V CAT	HETER	PLAC	CED:		C _					PRO	BLEM										
DAILY	WEIGHT		DA'			_/_			_						PM												AM
		FREQ.	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
T																											
P																											
R																											
ATTITI	JDE:																										
S	TYPE																										
FLUIDS	ML/HR																										
14	CUMULATIVE																										
BM (Di	(ARRHEA)	П																									
VOMIT	ING																										
URINE	OUTPUT																										
FOOD																											
WATER	k .																										
MEDIC	CATION AND MISCELLANEOUS:	FREQ.	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
		П																									
		П																									

Hospitalization Record/Ongoing Nursing Notes

Client:	Patient:	Day of Ho	ospitalization	
Date:	Species:	Sex:	Age:	
Problem/Diagnosis				
			· · · · · · · · · · · · · · · · · · ·	
	De conded by			
	Recorded by:	Student's Name Pri	nted	
I attact that the student r	ecorded this information			