

Activity 3.1.4

Evidence Evaluation

DATE	PORTAL DAY	LESSON	TURN IN
Friday 2026-11-18	Infection-control CER	Lesson 3.1 Nosocomial Nightmare	CER

Where this sits. Single day. Day 4 of Lesson 3.1. This is the day the source gets named.

01 Why today matters

Today you get the records that connect the patients to each other: therapy animal visits, staff schedules, and the logs of what was delivered and restocked on every floor.

You will commit to one source in writing, defend it with evidence, and then look at a stained slide that tells you which category of agent you are chasing.

02 What you already know

- You have the hospital map with all eleven patients plotted and the patterns you wrote down.
- You have a category hypothesis and the evidence you used to rule other categories out.
- From Unit 1 you know a claim is worth nothing without the evidence and the reasoning that link it.

WHAT THIS SHEET WILL NOT TELL YOU

- This sheet does not name the source. Three sets of records do, and you have to read them.
- It does not tell you which category of agent the slide shows.
- It does not tell you what the hospital lab found. Wait for the lab.

03 Vocabulary

TERM	WHAT IT MEANS, PLAINLY
etiology	The cause of a disease. It can be a pathogen, but it can also be a gene, a diet, or something in the environment.
therapy animal	A trained animal brought in to lower a patient's stress and lift their mood, always with a handler who supervises the visit.
handler	The person who trains the therapy animal and stays with it for the whole visit.
anesthesiologist	The doctor who gives and monitors the medication that keeps a patient sedated during surgery.
radiologist	The doctor who runs and reads diagnostic images such as x-rays.
shift	A block of hours a staff member works. Hospitals run around the clock, so the same patient is cared for by different people at different hours.

lot number	The code printed on a box of supplies that identifies exactly which production batch it came from. If one batch is contaminated, this is how you find every place it went.
restock log	The record of which supplies were put onto which floor's cart, and when.
receiving log	The record of what arrived at the hospital loading dock, from whom, and when.
confound	Something that makes two things look connected when they are not. If a nurse works the whole floor, every patient on that floor shares that nurse, and the sharing means nothing.

Every term on this list is flagged for the illustrated glossary, scoped to this activity only. Terms are not shared forward or backward between activities, because a definition from a later activity can hand you an answer you were supposed to derive.

04 How to do the work

- 1 Start by rereading your own notes. Write down every question you still have open and everything you have already ruled out, with the reason. Five minutes. You are about to get a lot of records and you want to know what you are looking for.
- 2 In Hospital Hub, open Therapy Animal Visits. Note which of the eleven patients had a visit, which animal, and when. Note who did not have a visit. Remember that all the therapy animal visits happened on the same day, and that only patients staying longer than three days and not allergic to animals were offered one.
- 3 Open GNMH Staff Schedules. Work out which staff members were with which patients, and when. Look for a person who covers all eleven and only the eleven, and look for staff who cover most of them but not all.
- 4 Open the Receiving Log and then the Cart Restock Log under the Info menu. Track lot numbers. Ask which floors got which lots, and whether any lot lines up with the patients you care about.
- 5 Now run the test that separates a real source from a coincidence. For every candidate you find, answer two questions in writing. Does it reach all eleven infected patients? Does it miss the patients who did not get sick? A candidate that fails either question is not your source yet.
- 6 Discuss with your group. Bring your candidates and your two answers, not just your favourite theory. Somebody in the group should deliberately argue against the leading candidate.
- 7 Write your conclusion about the source, with the evidence and your reasoning. This is the claim, evidence and reasoning you are turning in.
- 8 Write the recommendations you would give the hospital to stop the spread, based on the source you named. Tie each recommendation to a link in the chain of infection.
- 9 Switch tasks. With a partner, name the etiology of three conditions: flu, athlete's foot, and familial hypercholesterolemia. One of them is not caused by a pathogen at all. Then name one disease with a lifestyle risk factor and say what the factor is.
- 10 The hospital lab has samples from every infected patient, collected from the site of each infection: throat and nose swabs for respiratory infections, a skin culture for skin infections, urine for urinary tract infections. Write down why they collect from the site of infection rather than, say, always taking blood.
- 11 Look at the stained slide the lab shows you, at 1000x. Record what the cells look like: shape, size, whether they are together or separate, how many different kinds you can see.
- 12 Name the category of infectious agent, with your reasoning. Then write the initial treatment you would recommend the hospital start while everyone waits for the exact identification, and say why that treatment matches that category.

05 Where students get stuck

- Stopping at the first shared thing. Almost everything in a hospital is shared. The first pattern you spot is usually a confound, not a source. Keep going until you have one that covers all eleven and leaves out the patients who stayed well.
- Forgetting the patients who did not get sick. They are evidence. If your candidate source also reached twenty healthy patients, either it is not the source or something else has to explain why only these eleven.
- Ignoring the negative space in the therapy animal data. Who was offered a visit and did not have one, and who was never eligible, tells you as much as who was there.
- Skipping lot numbers because they look like clerical junk. A lot number is how a contaminated batch gets traced through a building. It is the single most specific piece of evidence in the records.
- Naming a category from the slide by vibe. Say what you actually see. Size relative to the field, shape, and arrangement are observations. The category is an inference you build on top of them, and you should be able to say which observation forced it.

06 What you turn in

CER

CER, one per team, handed in at the end of the period. Claim: the source of the infections. Evidence: the specific records that support it, named exactly, including the ones that rule out your other candidates. Reasoning: why that evidence supports that claim and not another. Add your recommendations to the hospital underneath, each tied to a link in the chain of infection. Your category call and slide notes go in your notebook.

07 Check yourself

- ☐ What are the two questions a candidate source has to pass before you name it? (How to do the work, step 5)
- ☐ Why is a lot number more useful evidence than 'the hospital ordered a lot of gloves that week'? (Vocabulary)
- ☐ Familial hypercholesterolemia is on today's etiology list. Is it infectious? What kind of cause does it have? (Vocabulary, and Unit 2)