



## Client story - Example

### When You Hear Hoofbeats, Don't Think Zebras

*This story has been taken directly from The Institute for Health Improvement site.*

**Description:** In this patient story, you'll meet Lauren, an 18-year-old female who endured a painful journey through the health care system. One morning during her first semester of college in Boston, Lauren woke up with soreness in the side of her face. Several months — and a misdiagnosis — later, the pain only got worse. As you follow Lauren's story, you'll be prompted to stop along the way to consider a number of questions about the care she received and decisions made by her providers. When we get to the end, you'll hear from Lauren to get her perspective on the experience.

Lauren is an 18-year-old college freshman in Boston. After a few weeks of school, she begins to feel pain when she applies pressure to the left side of her face. The pain is very apparent when she closes her mouth and chews, and exists even when she puts her head down on a pillow. It's the first time in her life that Lauren has felt the pain.

In fact, she's been fairly healthy for most of her life. Other than two broken wrists and common seasonal sicknesses, she's had little need to use the health care system.

On her own, she starts a regimen of Motrin to help cure the pain. Two weeks pass. The pain just gets worse — she describes it as “sharp and knife-like.” The pain has also started to spread, going from the top of her face, to her ear, to her chin, to her jaw. Lauren has trouble eating and sleeping, and is often in tears. She finally decides to visit the university clinic.

The nurse at the clinic performs basic tests — checking for a fever and inspecting the ear, nose, throat, and eyes. She tells Lauren to take Advil, avoid chewing gum (because it can aggravate facial pain), and come back to meet with a doctor a few days later.

During the visit with the doctor at the clinic a few days later, Lauren explains that the pain is even worse. The doctor checks Lauren's reflexes and balance. He then leaves the room and comes back with two students so they can learn and observe. Dumbfounded after two hours of tests, the doctor refers Lauren to an ear, nose, and throat specialist at a major teaching hospital in Boston.

A week later, now the end of October, Lauren arrives for her appointment. During four hours in the office, she endures a long series of tests, including more for her balance and equilibrium. She also spends time in the Audiology Department and gets extensive hearing tests done.

Finally, the doctor diagnoses Lauren with a case of internal shingles in her ear canal. He explains that since she had chicken pox when she was little, she is susceptible to getting shingles. Lauren asks if he can see anything like shingles inside her ear. The doctor says no, but surmises that there was an outburst a few months ago and that the nerve damage was becoming evident now. He explains that it's a disorder called postherpetic neuralgia and that she may also have trigeminal neuralgia, or unexplained pain that affects parts of the face. The doctor prescribes an anti-seizure medication (to help calm the nerves causing pain), an opiate to help manage the pain, and a stronger painkiller for especially difficult episodes. Lauren is instructed to take the pills three times per day.

The visit ends with the doctor telling Lauren that here is no guarantee the pain will ever go away.

Lauren talks to her mother, an anesthetist, after the appointment. Her mom says she's confused because she's never heard of all this happening to an 18-year-old woman.

<http://www.ihl.org/education/IHIOpenSchool/resources/Pages/Activities/LaurenMasonPatientStory.aspx>



Lauren starts the medication and begins to experience severe side effects. She feels lazy, tired, depressed, forgetful, unmotivated, and has trouble concentrating. She also loses her appetite and starts experiencing night terrors.

Lauren goes home for Thanksgiving to worried parents. In the middle of her first night in New Jersey, her mother takes her to the emergency room at the local hospital. Again, Lauren endures a series of tests and lists her pain as “off the pain scale.” The physician asks about the medications she’s taking and asks who prescribed them. When he hears the name of the specialist in Boston, he appears impressed. Lauren leaves with advice to follow the medication regimen.

Back at school, Lauren struggles, but is able to make it through the semester. The side effects, however, continue to get worse.

When she goes home for Christmas, Lauren’s father asks if she’s recently been to the dentist. He makes an appointment for Lauren a few days before Christmas. There, Lauren tells the dentist about the painful, three-month ordeal. The dentist takes x-rays and immediately sees a massive abscess stemming from a molar on the lower left side of Lauren’s mouth. The dentist comments that she must be in “extreme pain” and that “this thing has been festering for a while now.”

The dentist calls Lauren’s long-time dentist and asks for the records of her last visit in July. The office denies that Lauren visited then. Lauren’s mother has a credit card receipt from the visit, but the office still claims it has no record.

Lauren goes for an emergency root canal with a local endodontist later that day. The typical amount of Novocain isn’t enough, as Lauren’s tooth has become too infected. The endodontist comments that the infection was close to the jaw bone and, if they hadn’t caught it, would have caused a lot more pain and further complications. The root canal is only the start of a series of dental work, but it greatly reduces Lauren’s pain.

Lauren’s mother calls the ear, nose, and throat specialist in Boston to explain the new situation and asks about the medications Lauren is still taking. The doctor explains that Lauren needs to stay on them for a few more weeks to prevent withdrawal and possible seizures, and must be slowly weaned off of them.