You’ve got a crumpled slip of paper in your hand with a name and phone number on it—or maybe you’re hovering over the “call” icon on your cell phone. Regardless, you’re nervous. You’ve thought through the best way to arrange a meeting—in a public, neutral place like a coffee shop where you can get to know each other. Now, all you have to do is call this stranger and initiate a relationship—hopefully one that lasts for years to come. Cripes, why did you volunteer for this? What do you even say when he picks up?

Mike Bruno knows the feeling. “There’s the anxiety about the unknown, like, Who is this guy I’m about to go meet? What’s he gonna be like? What’s he gonna think of me?”

Bruno dialed, waited. The voice at the other end wasn’t what he was expecting.

“He said, ‘Not interested!’ and hung up,” Bruno recalls. Turns out, the stranger thought Bruno, then a first-year medical student at Pitt, was an out-of-state telemarketer.
Deep breaths. Summon courage. Dial again. On the second try, the man gave Bruno enough time to explain himself—that he was a medical student participating in the Longitudinal Alliance Project (LAP) and that he’d been given the man’s contact information as part of the program. In effect, the man was Bruno’s very first patient.

At the University of Pittsburgh School of Medicine’s annual curriculum colloquium in 2012, Arthur S. Levine, an MD, senior vice chancellor for the health sciences, and the John and Gertrude Petersen Dean, proposed a new program to neatly complement the med school’s basic science strengths. He suggested pairing students with a moderately complex case, a patient whom they would follow through the course of their education. The only other longitudinal experience, after all, is the scholarly project—the four-year research endeavor Pitt med students undertake. This was like adding another, very different pillar to it’s these students’ first shot at a long-term patient relationship.

“You know, in some sense, it’s kind of easy and superficial to spend your whole life having one-night stands,” Maier offers as an analogy. “But that’s not the way to build relationships or a successful community on all sorts of other levels. And I suspect the same is true in medicine.”

“In all of our clinical experience, we’re standing next to the doctors,” Bruno explains. He’s an articulate young man with a neat haircut. Today, he’s donning a T-shirt from UConn, his alma mater. “But in this program, it flips our roles and lets us sit beside the patient. And it has a whole different tone to it. Because after the visit, we don’t just go and talk to the doctor and debrief with the doctor: So what do you think of this lab value? Instead, we’re debriefing with the patient: So what do you think about what the doctor said? Did you get everything out of that? That is really support the curriculum.

Robin Maier, an MD, assistant professor of family medicine, and director of medical student education in that department, attended that colloquium and thought the program sounded interesting. What impressed her, she says, is that “there’s this sense of seeing the medical system from the inside out, from the patient perspective,” rather than the usual doctor-side-in way of doing things. After telling the dean as much, she was quickly asked to head the pilot program.

Maier, who’s also the clerkship director for family medicine, launched LAP in 2013. Mike Bruno was in the inaugural class of 10—all volunteer students who’d been handed a pamphlet on the program. The brochure promised an experience to “put a human face to your pathophysiology learning, to facilitate communication … [and] to identify barriers to care and gaps in care.”

But the program is even more than that—what distinguishes this experience—and why I think it’s valuable.”

There’s an obvious benefit to the traditional apprentice-master style of medical education; it lets students see the work life of a physician—the grind, the frustrations, the victories. But, as Lisa Podgurski, an MD clinical assistant professor of medicine specializing in palliative care, and a leader of small group discussions for second-year LAP students, points out, without a long-term view of a patient, students are really only seeing a small part of a person and an illness.

“The average length of stay in a hospital is somewhere around four days. And so you see very discrete snippets of someone’s illness course, and it’s much more rare to see all of it,” she says.

During medical school at Harvard, Podgurski participated in a shorter longitudinal program called the Cambridge Integrated Clerkship. The idea behind it, she says, is that “kids today aren’t seeing the full progression of how things go,” or so her elders put it. “They aren’t seeing an infection heal. They’re only seeing the antibiotics get started, and then [the patients] finish at home.” Programs like LAP, she suggests, are “one way to try to bring continuity back.”

And LAP brings that up front—before students take real medical histories, before they wield stethoscopes, before they’re in clerkships.

Each year of LAP is loosely guided by a theme. Getting to know the patient is the bulk of year one. Getting to know the health care team and its interprofessional interactions makes up year two. Maier arranges for other health professionals to join in on small group discussions that year, starting the tilt toward medicine-as-team-sport thinking. In the third year, the focus is on the different specialties of medicine and how they interact—how a family doctor might refer her patient to a radiologist, who then refers him to a radiologist for imaging and then sends the result back to the patient and the primary doctor. Ultimately, as the student grows in his medical knowledge, LAP grows with him. Bruno says that what he gets out of the program “changes all the time,” depending on what he’s learning elsewhere in the curriculum. It’s organic and symbiotic.

In that first year, Podgurski (Res ’12) and Maier (Res ’04) want students to really understand the day-to-day life of their LAP patients. From the quotidian—How do they get around? What neighborhoods are they in? With whom do they live? Do they work?—to the increasingly intimate—What are their family and home lives like? How does their background and culture affect their everyday lives? What are their struggles? Put another way, these students gradually discover what interpersonal and social factors influence this person’s health.

Of course before Bruno, or any of the students, receive a LAP patient’s contact informa—
tion, they are given briefings on confidentiality requirements, HIPAA rules, and the like. During LAP orientation and beyond, students are reminded that their role is not to offer medical advice or translation to these patients. Bruno likens the relationship to being ambassadors for the medical community.

Though students are never required to do a home visit, they can if their patient invites them and their faculty mentor gives permission. Students mainly communicate with patients over the phone, through texts and e-mails, and during medical appointments or other in-person meetings.

By the end of that first year, Bruno was expected to understand the biology of his patient’s conditions. As a capstone, he and the other students each gave a presentation to the small group on the medical science behind their patients’ health concerns and wrote reflective papers on their experience with the patient and LAP.

Both Maier and Podgurski have formal training in medical education—the former as a fellow of the Society of Teachers of Family Medicine and the latter as a graduate of Pitt’s medical education master’s program—and both model the role of thoughtful communication in medicine. They were a natural pair to codesign the LAP curriculum.

Maier makes a point of never asking students what specialty they plan to enter, understanding the pressure behind such a question and the assumptions that might come with the answer. In her presence, discussions are considerate in every sense of the word, and revelations are important but always provisional.

For instance, when a LAP patient opted to meet her med student for a meal at a fast food restaurant, Maier and the group thought about why she might be making that choice—maybe the restaurant is close to home, or maybe she thought the student would feel more comfortable there. The group didn’t judge; they wondered.

The learning that goes on in these group sessions, though difficult to quantify, is a huge part of LAP’s success, the students say. The sheer breadth of conditions and individual circumstances each student encounters—and therefore shares with the others in his group—range from children with Down syndrome to adults with cancer, from people on dialysis to those newly diagnosed as diabetic. Young, old, pregnant, single, rich, poor. Some have trouble with Pittsburgh transit and miss appointments when the ACCESS buses don’t run on snow days. Others are caring for young or sick loved ones and don’t have the energy or time to focus on themselves. Some don’t have a car

Baby food or medication? One student was surprised to learn the reason a LAP patient decided not to fill her prescription.
or a grocery store within walking distance of their homes. When, as has happened twice, a patient in the program dies, the students grieve together. When another patient’s diabetes comes under control—because of a dental procedure, of all things—they celebrate.

Recruiting that range of patients willing to begin such a relationship with a medical student is a challenge. But LAP has its own matchmaker: Patricia Zahnhausen, a longtime education coordinator for the Department of Family Medicine. She schedules elective courses, recruits sites and physicians for clerkships, and performs other vital administrative work to make programs like LAP run.

LAP started with patients from Maier’s practice and other family and internal medicine colleagues’ patient pools, as well as an outpatient ob/gyn clinic and a pediatric oncology group. Then Zahnhausen approached local dialysis clinics. They’ve since sought out gastric bypass recipients, orthopaedics and endocrinology patients, those with autoimmune diseases—just about anybody who visits health care providers more than a few times per year. Next year, they want to include patients at the VA Pittsburgh Healthcare System.

Zahnhausen usually meets patients face-to-face and signs them up on the spot. She then follows up with consent forms and matches them with a student of the gender and language background of the patient’s choice. Before long, the student makes that scary first call.

The patient recruiting process for each student class takes Zahnhausen two to three intense months. “It’s a labor of love,” she says. And a job well done: So far, only a half-dozen or so of the nearly 100 patients she’s enlisted have left the program. The most recent LAP group numbers nearly 60, and Zahnhausen and Maier expect next year’s group to be even bigger.

But what about those patients? What’s in it for them? Why would someone who already has a complex illness to manage agree to this unique relationship? According to Zahnhausen, some of them love teaching the next generation of doctors; Podgurski has even heard it described as leaving their “legacy.” The LAP patients help med students understand the health care system, and they help improve it.

In the small groups, Podgurski says, “We feel a lot on handling emotion, because that’s a big part of being sick and having a loved one be sick.”

Sometimes it’s the students’ emotions they are addressing. One patient frequently texted and sent photos of herself to someone in Maier’s small group. This started a debate—is it okay to be in frequent texting contact with LAP patients? Students in Podgurski’s small group also struggled with the boundaries of engagement—is friending each other on Facebook okay? How about sharing a car ride to an appointment?

“Maier’s voice grows more quiet: ‘And then the student just kept being there! And all of a sudden . . . they love these students.’”

It takes a while to get there, though. Maier summarizes the general steps toward intimacy: “At first, [the volunteers] were patient with the student, figuring out how to have them around. Then there was a period of time where I could tell they’re kinda like, Oh, no, this isn’t a good idea.”

Maier’s voice grows more quiet: “And then the student just kept being there! And all of a sudden . . . they love these students: This is my student. They may not be perfect, but this is the one I love. And they’ll complain—Why is the medical school making them so busy that they can’t come to all my appointments? That’s so real,” she nearly whispers, awed.

In the small groups, Podgurski says, “We focus a lot on handling emotion, because that’s a big part of being sick and having a loved one be sick.”

Sometimes it’s the students’ emotions they are addressing. One patient frequently texted and sent photos of herself to someone in Maier’s small group. This started a debate—is it okay to be in frequent texting contact with LAP patients? Students in Podgurski’s small group also struggled with the boundaries of engagement—is friending each other on Facebook okay? How about sharing a car ride to an appointment?

“Maier’s voice grows more quiet: ‘And then the student just kept being there! And all of a sudden . . . they love these students.’”

It takes a while to get there, though. Maier summarizes the general steps toward intimacy: “At first, [the volunteers] were patient with the student, figuring out how to have them around. Then there was a period of time where I could tell they’re kinda like, Oh, no, this isn’t a good idea.”

Maier’s voice grows more quiet: “And then the student just kept being there! And all of a sudden . . . they love these students: This is my student. They may not be perfect, but this is the one I love. And they’ll complain—Why is the medical school making them so busy that they can’t come to all my appointments? That’s so real,” she nearly whispers, awed.

In the small groups, Podgurski says, “We focus a lot on handling emotion, because that’s a big part of being sick and having a loved one be sick.”

Sometimes it’s the students’ emotions they are addressing. One patient frequently texted and sent photos of herself to someone in Maier’s small group. This started a debate—is it okay to be in frequent texting contact with LAP patients? Students in Podgurski’s small group also struggled with the boundaries of engagement—is friending each other on Facebook okay? How about sharing a car ride to an appointment?

“Maier’s voice grows more quiet: ‘And then the student just kept being there! And all of a sudden . . . they love these students.’”

It takes a while to get there, though. Maier summarizes the general steps toward intimacy: “At first, [the volunteers] were patient with the student, figuring out how to have them around. Then there was a period of time where I could tell they’re kinda like, Oh, no, this isn’t a good idea.”

Maier’s voice grows more quiet: “And then the student just kept being there! And all of a sudden . . . they love these students: This is my student. They may not be perfect, but this is the one I love. And they’ll complain—Why is the medical school making them so busy that they can’t come to all my appointments? That’s so real,” she nearly whispers, awed.

In the small groups, Podgurski says, “We focus a lot on handling emotion, because that’s a big part of being sick and having a loved one be sick.”

Sometimes it’s the students’ emotions they are addressing. One patient frequently texted and sent photos of herself to someone in Maier’s small group. This started a debate—is it okay to be in frequent texting contact with LAP patients? Students in Podgurski’s small group also struggled with the boundaries of engagement—is friending each other on Facebook okay? How about sharing a car ride to an appointment?

“Maier’s voice grows more quiet: ‘And then the student just kept being there! And all of a sudden . . . they love these students.’”

It takes a while to get there, though. Maier summarizes the general steps toward intimacy: “At first, [the volunteers] were patient with the student, figuring out how to have them around. Then there was a period of time where I could tell they’re kinda like, Oh, no, this isn’t a good idea.”

Maier’s voice grows more quiet: “And then the student just kept being there! And all of a sudden . . . they love these students: This is my student. They may not be perfect, but this is the one I love. And they’ll complain—Why is the medical school making them so busy that they can’t come to all my appointments? That’s so real,” she nearly whispers, awed.

In the small groups, Podgurski says, “We focus a lot on handling emotion, because that’s a big part of being sick and having a loved one be sick.”

Sometimes it’s the students’ emotions they are addressing. One patient frequently texted and sent photos of herself to someone in Maier’s small group. This started a debate—is it okay to be in frequent texting contact with LAP patients? Students in Podgurski’s small group also struggled with the boundaries of engagement—is friending each other on Facebook okay? How about sharing a car ride to an appointment?

“Maier’s voice grows more quiet: ‘And then the student just kept being there! And all of a sudden . . . they love these students.’”
Prabhu had never considered how tough it might be to parent a kid with medical challenges. “Her mother said she feels she and her husband relate more to people without kids,” Prabhu says—with those friends, the focus isn’t on typical kid activities that Alice doesn’t take part in. Yet as powerful as those difficult moments can be, Prabhu came to realize that Alice’s and her family’s lives don’t revolve around them.

Alice loves horses and car racing. She adores country music—so much so that the family dog is named after her favorite singer. She prides herself on being a “diet cola” in the age of the Starbucks. “I know Alice and her mother need to be left alone, but I have to ask myself, ‘Is this really the best I can do?’”

In his recent rotation in the emergency department, Prabhu was reminded of Alice and her mother.

“You’re doing a good job—somebody said that to a patient’s mom yesterday,” he says. “And it reminded me of my longitudinal patient’s mom—she was just kind of thrown into this. She was saying at first she was really overwhelmed, and it would be nice to hear something like that from a provider.”

Alice’s family has taught her other lessons, too, like making sure to sit at the patient’s level and look her in the eye, even if she doesn’t seem to make eye contact. Stand at the side of the hospital bed, not the foot. Focus on how the patient reacts after hearing medical information. Basic stuff, it seems, but little gestures that—especially when established early in a doctor’s career—make a difference.

One surgeon Alice’s family consulted to see whether she might benefit from a procedure on her spine was dismissive of their request for a consult. He kept insisting that Alice didn’t need surgery and didn’t listen to his request for a consult. He kept insisting that Alice didn’t need surgery and didn’t listen to her mother. It’s giving students real insight into how it is to deal with the medical system … which is something that makes every kind of physician a more effective physician.” It teaches them what kind of doctor they want to be.

In Bruno and Prabhu’s final LAP year, Maier will ask their small group to think critically about the health care system as a whole. Issues under that umbrella—such as how the Affordable Care Act is affecting insurance premiums or how patients cope with unexpected medical bills—have come up all the way through the program, of course. But as these nearly doctors apply for residencies and steel themselves for the hands-on work of everyday doctoring, they will be looking at it from a whole new level of responsibility, and a much more challenging environment in which to build relationships.

How will Bruno quickly establish a rapport with a feverish child in the emergency department? What will Prabhu say to the woman who’s refusing a cast on her broken arm because she doesn’t have insurance? How will they apply the lessons from LAP to their practice?

Dean Levine, in fact, has called for an increased emphasis on “social medicine” within the fourth-year curriculum, which fits nicely into the planned themes for LAP. The concept of social medicine has been around since at least the early 1800s, when the so-called father of modern pathology and “Pope of German medicine,” Rudolf Virchow, famously proclaimed that “Medicine is a social science, and politics is nothing else but medicine on a large scale. Medicine as a social science, as the science of human beings, has the obligation to point out problems and to attempt their theoretical solution.”

No one expects the LAP students to run for city council anytime soon, but seeing their patients’ experiences through the lens of social medicine is yet another way to look past the pathophysiology trees and see the forest of societal factors that surround them. How healthy an individual is, the theory argues, becomes a societal concern. In this view, governments and public institutions should promote health and healthy behaviors in individuals, and we should all recognize that social and economic factors influence not just disease, but medicine as a discipline.

As a whole, America does not tend to see medicine in this way. On top of that, Maier says, “We spend enormously more money” than other developed nations, “and we generally don’t do quite as well in terms of outcomes.

“We do an awful lot of urgent care and in-and-out kind of stuff and, as a result, all sorts of things get lost in the shuffle because there’s not good continuity.” Continuity of care is linked to better health outcomes, and it tends to deepen respect and understanding.

Bruno and Prabhu both call LAP the best thing they did in medical school. Despite that sentiment, Maier and the students think it’s best to build LAP slowly, sticking with students who seek out the experience; these self-selected 92 students value being collaborators in a self-guided program. Bruno’s advice to future LAP students sums it up: “Have fun with it. Remember that this is something for you. You’re not being graded. You don’t have to be in a super analytical position. You get to be a person to this person, sit by this patient’s side.”

Maier and the other third-year LAP students have been negotiating the best way to cap off the program when the time comes. There’s talk of elder students “handing off” their patients to the incoming first-year brigade. They like the sense of continuity and kinship that would provide. But would the magic of the relationship carry over to a new partner? Maier’s not one to dictate, so she probably won’t prescribe an ending to this either.

Will Mike Bruno send his patient a holiday card after he graduates—something to keep the relationship going? His reply is quick: “I think it would be great to stay in touch, but a Christmas card! I don’t think so, only because he’s not that kind of guy.”

If you know someone who’d like to “adopt” a medical student, contact Patricia Zahnhausen at 412-383-2248 or zahnhausenpe@upmc.edu.