

## Case Study: Behind the Curtain

*Ohio radiologists collaborate with a patient advocate to implement a direct results delivery program that decreases patient anxiety and gives radiology a face.*

By Chelsea Krieg

### Key Takeaways:

- Cincinnati Children's Medical Center has implemented a direct results delivery program that allows patients and families to discuss their test results directly with a radiologist.
- Providing results directly to patients helps decrease patient and parent anxiety, while increasing their understanding of what radiologists do and how the department operates.
- Connecting with patients reemphasizes the importance of the individual behind the image, reinvigorating radiologists' sense of purpose and reducing burnout.

When David C. Mihal, MD, diagnostic radiology resident at the University of Cincinnati Medical Center, began working on his practicum for [ACR's Radiology Leadership Institute \(RLI\)](#) he knew he wanted to use the opportunity to make a real difference for patients and families. But before Mihal could improve the patient experience, he needed a better understanding of how patients and families perceived radiology.

To that end, Mihal turned to Dianne Hater, patient and family advocate in Cincinnati Children's radiology department, to help him focus his efforts to foster meaningful and positive change in patient and radiology relations. Through her research, Hater found that patients and families were often nervous about their imaging exams and, for some, uncertainty about how to obtain their imaging results increased their anxiety. "Patients and families want answers, so having to wait for results creates a lot of stress," Hater says.

Recognizing an opportunity to significantly improve the patient experience through better communication, Mihal initiated a direct results delivery pilot project that would allow patients and families to review their exam results directly with a radiologist immediately after image acquisition. Since its inception in 2015, the project has drawn praise from patients and families, with 92 percent providing positive feedback on surveys, and has led to 84 percent of participating radiologists and technologists reporting increased job satisfaction — leading the department to adopt it as an ongoing initiative.

### Patient and Family Perspective

When Mihal decided to embark on a patient experience improvement project, he wanted to ensure the change would be something patients and families wanted and needed, not just what he assumed they needed. That's why his first step was to reach out to Hater for help. "I approached Dianne because she was deeply entwined in patient and family relationships at Cincinnati Children's, and I wanted to make some sort of real difference that would directly benefit them," Mihal says.



David C. Mihal, MD, diagnostic radiology resident at the University of Cincinnati Medical Center, initiated the department's direct results reporting project to give patients a chance to speak directly with radiologists.

Once onboard, Hater, who became an advocate for patients and families after navigating the health care system during her own daughter's illness, began talking with the hospital's frontline staff, including registration personnel, patient advocates, and child-life specialists, about their interactions with patients and families who had undergone imaging. Many staff members reported that patients and families were often concerned about having to wait for imaging results, and they lamented having few tools available to help minimize patients' and families' anxieties.

Hater also interviewed radiology technologists, since they have the most interaction with patients during image acquisition. From these conversations, Hater found that many patients and families were noticeably nervous during and after their imaging exams, and the technologists often felt helpless because they were unable to share results with patients and families. "We

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just did the best we could to ease their anxieties with the limited time we had with them," says Erin Adkins, an imaging technologist and quality improvement coach.

For even greater insight into the patient-and-family perspective, Hater reviewed patient feedback surveys from 2011 to 2015 to see what patients and families themselves had to say about their radiology experiences. That's when she discovered that patients and families were not only anxious about their results, but some were also stressed because they were unsure how to obtain their results. "Patients and families were saying, 'We just need answers. The waiting and not knowing is the worst,'" Hater says. "We knew there had to be a better way of communicating results."

### A Face to Radiology

To achieve that goal, Mihal and Hater conceptualized the direct results reporting project. They envisioned it as a natural extension of the department's existing "difficult news" program, in which radiologists deliver negative results directly to patients and families. Only in this case, the news would be mostly positive. "With the direct results reporting service, the results are often good, so the radiologists are able to immediately relieve the stress that patients and families feel, allowing them to walk away breathing a sigh of relief," Hater says.



Dianne Hater, patient and family advocate in Cincinnati Children's radiology department, found that patients and families were often nervous about their imaging exams and, for some, uncertainty about how to obtain their imaging results increased their anxiety.

To get the program off the ground, Mihal approached Brian D. Coley, MD, radiologist in chief and professor of radiology and pediatrics, and Bernadette L. Koch, MD, pediatric neuroradiologist and associate chief of academic affairs, about implementing it as a pilot project. Coley and Koch were both excited for the opportunity to reemphasize quality patient care and to give patients a chance to speak directly with radiologists. "This program provides patients with more positive experiences in radiology and puts a human face to the profession, helping patients understand the important role that radiologists play in their care," Coley says.

In addition to humanizing radiology for patients, the project also offered the chance for the department's radiologists to connect with their patients and feel more fulfilled as a result, says Alexander J. Towbin, MD, associate chief of clinical operations and radiology informatics and pediatric radiologist at Cincinnati Children's. "Oftentimes, as radiologists, we get detached from our patients. We are looking at pictures all day, and we see the body parts and the disease, but we don't always see the child on the other side of the picture," Towbin says. "Speaking with patients is an excellent reminder that we are diagnosing real people."

### A New Beginning

With support from the department's leadership, Mihal began rolling out the project slowly and purposefully. It's an approach he took in part to win support from his colleagues, many of whom were initially concerned that they would be unable to keep up with the volume of patients opting for the service. In fact, only seven of the department's 40 radiologists volunteered to participate in the project at first.

To put the radiologists at ease, Koch, who served as a physician champion on the project, reached out and encouraged them to participate in the consultations, explaining that each one takes only about 5 minutes. "As the program expanded and faculty saw how little time it actually took, it was much easier to get more radiologists involved," Koch says. On top of that, Mihal and his team addressed radiologists' workload concerns by limiting the number of patients who were eligible for the program. "I wanted to identify patients who would benefit the most from this service, while simultaneously limiting the number of patients to a manageable sample set," he says.

During the project's first of four phases, the department's technologists vetted patients and families, identifying those they thought were most likely to benefit from a direct consultation with a radiologist, such as patients and families who were visibly anxious or those who requested immediate

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results. Patients were excluded from the service if they were emergency patients, inpatients, had follow-up appointments already scheduled, were in a hurry to get to another appointment, or preferred to receive results from their referring physicians.

After deeming a patient eligible to receive direct results, the technologist would ask the patient and family whether they wanted to speak with the radiologist. If the patient and family opted for a consultation, the technologist located a radiologist from the volunteer pool, assigned the study to that radiologist, and informed the patient that the radiologist would be in soon to discuss the results.

The radiologist would then read the study and deliver the results directly to the patient in the exam or consultation room. Wait time for the patient was typically less than 10 additional minutes. After the consult, the patient would fill out a survey regarding the interaction with the radiologist and drop it into a locked box before leaving the facility. This feedback was invaluable in helping Mihal and his team understand what was working with the program and informed ideas for positive change.

### Adjustments and Growth

With only one patient per month opting into the program, the project's first phase did not attract as much interest as Mihal had hoped, so he and his team expanded the inclusion criteria and primary screening method. In doing so, they began allowing administrative staff to offer the service to any patient at check in who did not have a follow-up appointment already scheduled. This doubled the rates of patients opting for consultation from phase one but was still not quite the volume for which Mihal had hoped.

While low patient participation rates were initially discouraging, Mihal and his team didn't let it derail them. Instead, they took it as a learning opportunity and made efforts to improve the program. "When you embark on a project like this, it's important to measure your progress and look for areas of improvement," Koch says. "You must be open to changing small things to see if those changes will help rather than just abandoning ship."

For the project's third phase, the team expanded the program to all imaging outpatients. Patients opted into the program through a self-screening survey, which also included information that suggested a wait time of an additional 10 to 30 minutes. With this approach, only 8 percent of patients opted into the service — still well below the hoped for engagement. In the fourth and final phase of the project, the team



Alan S. Brody, MD, consults with a young patient about a procedure.

tweaked the survey, this time excluding the reference to the additional wait time, which they found exceeded the actual average wait time for the service and likely caused patients to opt out. As a result, 33 percent of patients opted into the service, bringing the number to approximately one patient per day.

### Program Feedback

In feedback surveys, patients and families were overwhelmingly satisfied with the service and reported feeling relieved and at ease after receiving their results from a radiologist. Comments included, "Made my day!" and "It immediately eased my mind and assured me everything was OK to return to work and school."

As a technologist, Adkins has been grateful for the opportunity this service provides to help lessen the anxiety that patients and families often feel. "When you see patients and families enter the room who are visibly nervous, you can immediately put them at ease by offering to find a radiologist to speak with them," she says. "A lot of what we do is so quick and this provides some closure and more connection with the patients. It gives you satisfaction in knowing that you are part of improving the patient experience."

In addition to increasing job satisfaction, most of the radiologists and technologists involved in the program report little increase in their workloads as a result. "If anything," Coley says, "spending time with patients minimizes physician burnout. It personalizes what radiologists do and allows them to connect more directly with patients."

Towbin agrees and says radiologists owe it to their patients to put in the extra effort. "I volunteered for this program because I strongly believe that families deserve to get results as soon as possible," he says.

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“Some families want the results from the pediatrician, and some families want to know whether something is wrong immediately. As radiologists, our job is to meet our patients’ needs.”

### Plans for the Future

Cincinnati Children’s radiologists were so pleased with the results of the pilot project that they have now integrated it into their regular workflow as a permanent and ongoing program for outpatients undergoing radiographs. “It’s been wonderful to watch this initiative grow,” Towbin says. “Knowing that we are able to provide this service efficiently and help put a face on the radiology department is incredibly satisfying. It really has a positive impact on our day, and we feel like we are doing something special for patients and families. What’s more, we’re showing others that this can be done.”

With this program as a proof of concept, Hater encourages all radiology groups to follow Cincinnati Children’s lead and offer to deliver results directly to patients. As someone who’s been on the receiving side of care, Hater knows how powerful such interactions can be and how much it can mean to patients and families to have the answers they need, when they need them.

“There’s no doubt how much patients and families appreciate it when they can get their results and have their questions answered immediately,” she says. “It saves them from so much worry and allows them to move more quickly toward treatment and healing. This kind of patient-centered care is the way of the future, and radiologists are well positioned to lead this effort.”

### Next Steps

- Start small. Look for manageable ways to provide opportunities for radiologists to interact more directly with patients.
- Find others who are excited to implement patient and radiologist interaction initiatives. Work together to brainstorm innovative practices and strategies to accomplish goals.
- Don’t be afraid to tweak what you are doing if something isn’t working. Ask questions and look for ways to alter the project rather than abandoning it.

### Join the Discussion

Want to join the discussion about how radiologists in one department implemented a direct results delivery program for patients? Let us know your thoughts on Twitter at #imaging3.

Have a case study idea you’d like to share with the radiology community? Please submit your idea to <http://bit.ly/CaseStudyForm>.



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