INNOVATION AND IMPROVEMENT

Improvement Happens – Learning to Better Care for “Super-Utilizers” at Denver Health: An Interview with Holly Batal

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*Holly Batal, MD, MBA, is a primary care internist and the Medical Director for the Denver Health Medical Plan. She was the co-Principal Investigator of a Centers for Medicare and Medicaid Health Care Innovation Award (HCIA), a component of which was to develop an Intensive Outpatient Clinic (IOC) (<http://www.denverhealth.org/for-patients-and-visitors/our-locations/main-denver-campus/intensive-outpatient-clinic>) for “super utilizer” patients at Denver Health. Dr. Batal was previously the director of General Internal Medicine at Denver Health when the grant began. The IOC has an active enrollment of approximately 365 patients who are eligible for the clinic because they have experienced at least three inpatient admissions during the prior 12-month period. In this edition of *Improvement Happens*, JGIM contributor Michael Hochman, MD, MPH, talks with Dr. Batal about the successes and challenges of developing the IOC at Denver Health.*

Picture 1 Dr. Holly Batal, primary care internist and Medical Director for the Denver Health Medical Plan.

JGIM: What is wrong with the way we currently manage the sickest, most complex patients in the United States?

Dr. Batal: Simply put, we don't spend enough time thinking about patients between visits. When I'm in primary care clinic, it's tyranny of the urgent. What's in

front of me. It's crisis management versus being proactive and helping the patients regain their health.

JGIM: How did you hope to address this problem with the Intensive Outpatient Clinic (IOC) at Denver Health?

Dr. Batal: With the IOC we wanted to see what we could do to help those patients who keep coming back to the hospital and emergency department over and over again. Is there a way we can help them improve their health and not spend so much time in the hospital? We thought: maybe if we focus on them intensely, pay attention to them, and develop resources around them, maybe we can do a better job helping these patients.

JGIM: Does this involve, as you suggested, taking better care of patients between visits?

Dr. Batal: Yes, that's right. The nursing and social work in the IOC is robust, which enables several points of contact for patients between visits. In addition, the providers have time to assist the care team and the patients with modifications to care plans and other problem solving between patients. The physicians and other team members will often see patients during hospitalizations and work with the inpatient team to better coordinate their care. The team has monthly case conferences to review care of patients and daily team huddles. They even meet regularly with the local mental health center to discuss patients that are co-managed. There is also an effort to continue to engage patients in care—following up on patients that have not come in for appointments.

JGIM: Why does this patient population require a different approach?

Dr. Batal: Initially we wanted all of our patients to have access to the same level of resources. But that's not really equitable because some patients, maybe even some communities, need a higher level of resources to achieve the same level of health. We've slowly come to the realization that we need to provide more intensive resources to certain groups. For example, we've had special resources in our HIV clinic for many years. But this is the first time we've put a group of patients together based on their utilization of health care resources.

JGIM: Who is eligible for the IOC and how do you identify them?

Dr. Batal: Our clinic is focused on our “super utilizers”—those patients who come to the hospital three or more times in a 12-month period. We recognized early

on that you can't just find these patients from claims data because of the inherent time delay in getting this information. You need to have real-time information. So we developed a daily hospital census list that allows us to flag patients when they hit their third, fourth, fifth, sixth, seventh, or eighth hospitalization. Then we outreach to them while they are still in the hospital.

JGIM: What can you offer these patients that they can't get elsewhere?

Dr. Batal: We tried to develop a primary care clinic that was like a dream clinic. To determine what resources we should have available, we did chart reviews, talked to patients, and learned about them. Then we developed a clinic around them. Some of the things we offer include longer appointment times, much more social work support, more navigator support, more ability for the patients to wander in when they are ready to seek care. We tried to be really thoughtful about the simple questions. What could we do in the clinic? What services could we provide? How much time could somebody be in the clinic? Where should the clinic be located?

JGIM: How does the IOC fit into the broader primary care milieu at Denver Health?

Dr. Batal: I think of us as a special clinic within the larger primary care system. Just as we have an HIV clinic, a Geriatrics Clinic, a clinic for children with special health care needs.

JGIM: How does the IOC interface with the rest of your primary care system?

Dr. Batal: The providers in the IOC are very intentional about talking to the primary care providers whose patients they're taking over. We let them know that we've talked to their patient, that we're engaging their patient. And we get their input on what has helped and what hasn't.

We also transfer patients who have "graduated" from our program back to general primary care. We don't aim to take care of patients for years and years. Maybe we care for them for a year, maybe for 6 months, or maybe for 2 years. But eventually we encourage them to go back to more regular primary care. We do provide some support during these transitions.

JGIM: Where did the concept for the IOC come from?

Dr. Batal: A few years ago, our CEO came to me and said, 'Just like every healthcare system, we have a small number of patients who are driving a lot of our inpatient and emergency department utilization and we need a strategy around them.' So I started reading and talking to experts. The work of Tom Bodenheimer from UCSF was foundational, and visiting the clinic that Paul Johnson set up in Hennepin County in Minneapolis to care for a similar group of high-utilizing patients was inspirational. I concluded that what would work best in our system would be to have a separate clinic to care for these patients.

As somebody who was at the time responsible for a lot of clinics in my role as director of General Internal Medicine, it gave me chest pain thinking about the providers in the "regular" primary care clinics who were working really hard and also needed more social work support and navigator support and more time with their patients. Instead of giving them a small amount of additional resources we were concentrating these resources to provide them to a much smaller number of patients. It made me stay up at night wondering, 'Is this the right thing to do?' But ultimately I realized that if we were going to make the primary care system more effective and efficient and take better care of these high-risk patients, then we would need to be intentional and provide separate and special resources to this population. Ultimately it was about shifting the thinking to be more about the patients and what they needed, rather than the provider or the clinic.

JGIM: Do you personally provide direct clinical care in the IOC?

Dr. Batal: As a general internist and someone who loves to work with underserved patients, I was initially jazzed to work in this clinic. I thought this is the way I've always wanted to provide care. But interestingly, I struggled to be a clinician in the IOC and I don't see patients there anymore. It was a little too intense for me. I couldn't find a way to not take it all home with me.

The physicians and providers that we have working there now are phenomenal and I believe they're more balanced than I am. They're able to deal with the highs and lows. I had trouble with it.

JGIM: Would you say it takes a certain personality type to work in a clinic like that?

Dr. Batal: Absolutely. A general internist is a pretty hearty breed, particularly the ones who do primary care. But I think you need the right person for this kind of job, someone who can feel comfortable in that setting and not get frustrated and not lose hope. I'd like to think of myself as that person, but I don't know that I am. Maybe if I had stuck with it I would have become more comfortable.

JGIM: Since it takes a special type of clinician to provide care in a high-utilizer clinic, do you think it makes sense to have clinicians who specialize in this type of care? Or is it better to have clinicians float back and forth between the "regular" primary care clinics and the high-risk clinic?

Dr. Batal: We have a bit of both. In general our physicians also work in other primary care clinics. However, our NP and PA spend all of their time in the IOC, which allows them to be on site continuity for our patients.

JGIM: You mentioned that your CEO at the time your project began reached out to you to help develop a strategy for your "high-utilizer" patients. How did you and the Denver Health leadership team justify the business case for the IOC?

Dr. Batal: The thing to point out is that initially we had funding through a Health Care Innovation Award from the Centers for Medicare and Medicaid Innovation. But even without this funding, the long-term business case is clear for us at Denver Health for those super utilizers who are covered under our own Medicaid managed care program. We are the ones paying the bills when these patients utilize care that does not improve their health. As we approached the end of the funding our leadership was able to recognize that the cost of the program could be offset by cost avoidance. The evaluation of the success of the IOC is part of the much broader evaluation of cost trends among our entire accountable population. During the first year of the award we documented medical claims cost reductions (cost avoidance) for the entire population. In supporting ongoing funding our Chief Financial Officer told me my next paycheck was going to come directly from cost avoidance. Hopefully she was kidding.

JGIM: Well, hopefully if your program continues to be successful, you will get a raise! Can you explain which populations Denver Health has financial responsibility for? Do you recoup the savings when you avoid costs for this population?

Dr. Batal: We have a managed care plan for Medicaid, and so we accept the financial risk of caring for our members. You could also make the argument that our uninsured patients are capitated because we're not being directly reimbursed when they come into the hospital. When we avoid unnecessary utilization for these two groups it can result in direct financial benefit to the organization.

JGIM: I see. So there are clear financial returns to Denver Health when you prevent an avoidable acute care visit. On another note, how do you identify patients for the IOC?

Dr. Batal: As I mentioned before, we get a daily list of patients with three or more hospitalizations in the past year. We try to comb through the list to exclude certain patients, for example, those being admitted for surgery. We also exclude patients who are undergoing active cancer treatment because we know the oncology service is taking good care of them. Occasionally, though, we will reach out to the oncology service and ask if they want to partner on these patients who keep popping up the list because they get readmitted due to social factors.

After we identify patients on this daily list, we do a clinical screening. We have staff who go to the patient's bedside in the hospital to do these screenings.

JGIM: What do these screenings involve?

Dr. Batal: Initially, the team—usually led by the NP—reviews the list of patients that are in the hospital who qualify and makes a decision about whether or not the patient has a condition that is amenable to IOC care. They then have someone—usually our navigator—go to the bedside to talk to the patient and gather additional

information about the patient's willingness and readiness to participate. Our IOC physicians have also begun rounding in the hospital and may visit with patients that have been difficult to engage, often at the request of the hospitalists. This may lead to some enrollments, too.

JGIM: How many patients per month show up on the trigger list?

Dr. Batal: It's about 300. Of these, about a third are clinically eligible while the rest are not appropriate for the variety of reasons mentioned above. Also, some are already part of our HIV clinic, or Geriatrics clinic—and since these programs already have special resources in place we don't screen them into our program.

Of those who are eligible and screened as clinically appropriate for the IOC, about a third will enroll. And we don't count a patient as "enrolled" until they've actually stepped foot in the clinic.

JGIM: What percentage of your total population is that 300 per month who show up on the list?

Dr. Batal: At Denver Health, our primary care system has an active patient panel of about 140,000 patients and about half of those are adults. So our super-utilizers end up representing a bit less than half of one percent of our total adult population. But it's worth noting that Denver Health defines its patient population a bit differently than other health systems. For this program at least, we included not just our Medicaid managed care population, but also uninsured patients and Medicaid fee-for-service patients who use our emergency department or urgent care or hospital three or more times in a year. So this enriches for high utilizers in our general primary care population.

JGIM: How do patients respond when your team first approaches them? Are they usually enthusiastic about the opportunity to get enrolled in the IOC?

Dr. Batal: I think it's a mix. There are certainly a lot of patients who initially say "yes" and yet then don't end up showing up for clinic visits. I'm sure these patients have good intentions and want to tell us what we want to hear. But then the reality of life kicks in. It's certainly not one and done, that's for sure.

JGIM: What's the no-show rate at the clinic?

Dr. Batal: A key question: for new patients who haven't yet set foot in the clinic, the no-show rate is over 50%.

JGIM: What strategies have you tried to reduce that no-show rate?

Dr. Batal: The biggest strategy is to try to engage patients. The team recently had a patient who came in for her first visit after 25+ admissions last year. The team had worked with her through numerous admissions to try to engage her in care, including the IOC physician meeting with her while she was an inpatient.

JGIM: Which patients are you most able to help? Are there any groups that you have struggled with?

Dr. Batal: We've realized that we have the most trouble with are people who are alcoholics. We have had a really

hard time engaging these patients. Ultimately, what they probably need is a place to live and to become sober. We've also realized that we are most comfortable dealing with patients with 18 different medical issues than we are dealing with substance abuse.

JGIM: Does that make you wonder whether you should integrate drug and alcohol and other substance abuse support services into the IOC? Or do you think the message is the opposite: that you need to wait for these patients to address their addiction issues before you expend resources trying to help them in the IOC?

Dr. Batal: It's an interesting question, and I don't know the answer. When we initially staffed the IOC, we had a certified addictions counselor on the team. We hoped that this would help engage our patients with substance use disorders and help them get into treatment and our clinic. But it didn't work very well, and I'm not sure why. Eventually we transitioned that position to a nurse.

It's worth mentioning that Denver Health also runs the medical detox unit for the city. We've been thinking about trying to partner with our local justice system to see if we can identify multiple touch points for some of these patients. But we're not there yet.

JGIM: How have the primary care clinicians responded to the IOC?

Dr. Batal: Initially, there was some confusion about who was right for the clinic. A lot of our primary care providers would think a certain patient would be good for the program and would get mad when the IOC would say that they didn't qualify. So I had to negotiate a lot of that angst.

Although it was hard to turn away patients, we knew that to be successful and make the business case for the IOC, we had to focus on the people who were utilizing a lot of hospital care in order to show financial outcomes. We knew that if we can save money, we can reinvest that within the primary care system as a whole and provide more services and more care.

JGIM: What hasn't worked well with the program?

Dr. Batal: One of our big challenges has been transitioning patients back to regular primary care. We know we have to graduate patients because we just don't have the physical space and because if you get too big you lose something important. The transition back to general primary care is really hard because the patients have gained trust with our team.

We also have struggled with patients who have frequent emergency department visits in the absence of lots of hospitalizations. They tend to be patients who spend a lot of time in detox and we'll engage them, get a hold of them, and then they won't follow through and we can't track them down.

We've also struggled with integrated behavioral health. There's a huge issue with mental health needs, substance

abuse, and behavioral health issues in this group of patients. But our model of having integrated behavioral health in other primary care clinics hasn't worked as well in the IOC because of the smaller volume of patients. We end up having our psychologist sitting there and there's no patient for them to see. With such a small population, it's hard to find the right balance between having a clinical resource available for a patient when needed and fully utilizing clinical staff.

Finally, we've struggled with home visits. We found that a lot of our patients don't want us in their homes. We're still playing around with home visits. We haven't been as successful as I think other programs have been.

JGIM: Yes, home visits can be challenging. Do you have a sense for why some patients were reluctant to receive a home visit? Was your initial goal that everyone gets a home visit?

Dr. Batal: We knew financially it wasn't going to work for every patient to receive a home visit. But we did think there was a group of patients that would need home visits, especially as they transition out of the hospital. The main reason they didn't want us to visit them in their homes appeared to be that they would feel judged. Many of our patients live in tough circumstances and have been criticized in the past. I think that they have a high level of respect for the healthcare team and may think that a home visit is akin to either being visited by the housing authority to document that they are appropriately taking care of their place or that they need to "entertain" the health care team with food and a nice place to sit.

JGIM: You mentioned that "graduating" patients from the IOC has been a challenge. How many patients have "graduated" and transitioned back to the general primary care clinics? Have you used specific criteria to help determine who is ready to "graduate" and have these criteria proven successful?

Dr. Batal: We've transitioned about 50 patients back to regular primary care. Again, that's been a struggle for us. There may end up being a subset of patients who need to be cared for within this intensive primary care clinic for their whole life. So far, determining who is ready to transition back has been a collaborative undertaking between the IOC team, the patient, and the primary care provider. Going forward, there is a need to be more structured in our approach so that we can determine what works best.

JGIM: This concept of "graduating" patients from the IOC may seem counterintuitive to some. The patients you identify for the IOC have multiple admissions, which is usually a marker for chronic disease and social dysfunction. These sorts of problems often require chronic, ongoing management. Is graduation as a concept even realistic for the IOC?

Dr. Batal: We believe so. People go through difficult times. Sometimes multiple factors collide, and it can

result in super-utilization. Helping people get a few of these factors under better control allows them to have the capacity to stabilize and slowly work on others. We want to be there for people if this happens again, but know that most people won't need this level of intensive health care services for life. That being said, we know that there will be a subset of patients that likely will always be near crisis, and we will likely need to stand beside them for most of their life.

JGIM: I see. Fifty graduates is not a lot. If you are having such a hard time graduating patients, how will the IOC become sustainable? Is the size of your clinic going to keep growing?

Dr. Batal: We need to start graduating more patients and we have been thinking that perhaps we should create something of a "step down" clinic that will help ease the transition back to general primary care for some patients. The "step down" clinic might also provide support for patients who should be in the IOC but have refused. And maybe it could also care for patients who the primary care clinicians think are about to tip over and become super utilizers. We're applying for some grant funding and looking for an evaluation team to consider this approach.

JGIM: What's the longest you had a patient enrolled in the IOC?

Dr. Batal: One patient has been in the program for 36 months now! When he was approached for participation in the clinic he was in the hospital for the seventh time in 12 months. In 2014 he had four inpatient stays and in 2015 three inpatient stays.

JGIM: Can you tell me about your staffing model?

Dr. Batal: Yes. We have four physicians who work in the IOC part time. Together they make up about 1 FTE. We also have about 1.6 nurses right now. And we have a nurse practitioner and a physician assistant who work together and also make up about one clinical FTE. Finally, we have a licensed clinical social worker, a navigator, a clerk, a medical assistant, 0.6 FTE of a psychologist, and 0.05 FTE of psychiatry time.

JGIM: What's the panel size of the IOC?

Dr. Batal: Currently we have 365 patients, spread across that team I just told you about. And of these, about 350 have been seen in the last 6 months. This is about 15% of the panel size our primary care providers carry in our regular clinics.

JGIM: I read in your CMS Challenge award application that you sought direct feedback from patients when designing the IOC. How did you go about soliciting this feedback?

Dr. Batal: The very first thing we did was take the list of high utilizers and started asking them a lot of questions: "What keeps happening? What's going on?" Patients would tell us how hard it is to be homeless and that they didn't have a place to store their oxygen.

They told us how hard it is to keep track of your medicines when you live in a car. In total, I think we looked at about 200 patient charts and talked to 20 patients. We used this feedback to determine what kind of social worker we needed, what sort of tolerance level our providers would need to have to meet these patients where they are. I don't know that we obtained this patient feedback in a really rigorous way, we kind of did it on the fly, but it was very helpful.

JGIM: Did you learn anything from the patients that you weren't expecting?

Dr. Batal: I think I'm always surprised by how resilient our patients are in dealing with such chaos. For me, the take-home point was that we don't need to always be heroes and "save" people, rather we can try to harness their resilience and allow them to get better. I think that may have been one of my challenges working in the IOC: I wanted to be the hero. But in many instances, you have to leave it alone, and I couldn't leave it alone.

JGIM: Should generalists be leading the IOC? Many of the medical issues likely get highly specialized. Would it make sense to embed specialists in high-risk clinics like yours?

Dr. Batal: I actually think that it needs to be generalists leading these clinics. Our specialist colleagues are fabulous, but sometimes they get lost in the disease-specific focus of the heart failure, the liver failure, the respiratory failure. And very few of our patients have single diseases. I think generalists are more accepting of doing the best that you can in a way that is patient centered and realistic. Also generalists generally do well with that lack of certainty that comes with not being able to give patients an exact diagnosis and the need to be more symptom driven, more functional, versus figuring out exactly what the ejection fraction is. On the other hand, we of course need to be able to communicate with our specialist colleagues and to respect and partner with them. And I think when we do this effectively, the specialists will be okay saying, 'well you didn't do it exactly the way I would have, but we're going to co-manage this patient together and I'm going to trust that you're doing what's right for this particular patient in this particular situation.' I think that's the fun of general internal medicine and the complexity of it. Nobody comes to you with just diabetes or just heart failure or just hypertension or just homelessness; they have all those things.

JGIM: That certainly resonates with me as a generalist!

Dr. Batal: Yes, it's what makes it so fun, but it's also what makes you rip your hair out.

JGIM: Yes it does! How does your team communicate with others within the medical neighborhood—the hospitalists, the specialists?

Dr. Batal: We try to create connection points. One of our nurses goes to the regular heart failure team

meetings. And about 6 months ago, the team began having providers take turns doing hospital rounds to help with discharge planning. At first, I worried that could be duplicative, since we have great hospitalists. But I think it means something to the patient to know that you're actually talking to other care team members and for them to see our faces in the hospital.

We've also tried to make ourselves readily available to the emergency room. If you need to call me at 11 at night when that patient's in the emergency room, call me at 11 at night. Our physicians provide coverage 24/7 to the RN advice line and ED to help coordinate care for patients when the clinic is not open.

JGIM: Do the IOC providers give patients access to their personal phone number and email?

Dr. Batal: Not routinely. However, we do have a 24-hour RN advice line that can contact one of the 4 physicians 24/7. This means that each physician has committed to being on call 25% of the time!

JGIM: Does your team work with community resources such as housing and other social services that may help your patients stay out of the emergency department or hospital?

Dr. Batal: Yes, we have tight connections with our coalition for the homeless. They have a separate primary care clinic, but they also do a lot of the housing for our patients. Also, the current MSW in the clinic is MPH trained and leverages her relationships with the city (human services, housing authority), non-profits, mental health centers, respite care, etc. She often partners with the inpatient social work team to be that continuity for the patient. Developing those relationships has been really important to the success of the IOC.

JGIM: Have you been able to help get some patients housed through the IOC?

Dr. Batal: Absolutely. Recently our social worker has partnered with a new city program that helps to house people more expediently who are at higher risk. Her knowledge of the patients and ability to advocate for them helps in getting patients housed during critical times.

JGIM: Do you have any hard outcomes yet on the impact your program is having?

Dr. Batal: We are using quasi-experimental methods to look specifically at health spending trends associated with the super-utilizer population over time.

Preliminary data suggest cost avoidance specific to this population (as well as to the overall population), but we are finalizing these analyses.

But what I think is most interesting is that this evaluation was set up to look at our entire accountable population, and as such our evaluation efforts were focused around looking at the population level outcomes rather than at the IOC in isolation. We felt that if we could make things easier for the primary care system by taking away some of the most difficult patients out of the mix, those primary care clinicians in the "regular" clinics would have more time and emotional capacity to deal with their most challenging patients. We wanted the ultimate result to be not just reducing costs or improving health for those patients care for in the IOC, but rather in the whole population. And we believe that's happening.

JGIM: Do you have any estimates of the financial return on investment data from the IOC?

Dr. Batal: We're working on a cost analysis now, but I can't give you an exact number quite yet. Hopefully soon! But I will say that one of the things I am really pushing for in this analysis that we're working on is a real cost to benefit ratio. I've read so many articles that talk about cost avoidance but they usually don't always tell you how much the program costs. We hope to be able to do both.

JGIM: Have patients been satisfied with their experiences in the IOC?

Dr. Batal: We ended up trying to assess this with focus groups. It's a little bit biased because we selected for the patients who were engaged in the clinic, not the ones who never showed up. But in these focus groups, the patients told us that they felt respected, that they didn't feel judged as much. And they felt like the clinic staff was there to help them.

JGIM: That sounds encouraging. Have there been any unexpected benefits of the IOC?

Dr. Batal: I think one of the somewhat unintentional benefits has been that we have been able to decrease some of the chaos in the "regular" primary care clinics. If we assign the most complex patients to providers and a group of staff who have the resources to help them, you reduce the frequency of those disaster visits when you have to care for a patient who needs all of this attention in the usual 20-minute slot. Another benefit is that, since the

physicians who work in the IOC also work in our general primary care clinics, it allows us to bring the learning back and forth. So we are probably getting better at managing complex patients in our general clinics as well.

JGIM: When we spoke before this interview, you mentioned that you were able to sustain the IOC program after your Innovation Challenge grant funding ended. How were you able to make the case for this to happen?

Dr. Batal: To put it simply, we had to show the financial impact, which in this case was cost avoidance. If we didn't have any data that we were avoiding costs, I don't know that we could have sustained it, even if everyone loved the program.

I also think that the stories we told about the patients we helped were a factor. We want to think that we make decisions based on objective data, but there's always that heartstring part of it too.

JGIM: It makes sense that the IOC would work at Denver Health because you have financial responsibility for many of your patients. Do you have any thoughts on how the IOC model might apply in a system that takes less financial risk—or none at all—for its population?

Dr. Batal: I think that's really, really hard. One way you might make a case for it is through provider engagement. We believe that the IOC helps primary care providers to be engaged in their work and feel like they're able to do a good job. So a group practice might be able to sustain a high-utilizer clinic that has lower productivity and more resources knowing that it's offset by other providers who see more patients. But I think it certainly would be really hard for an individual physician working in private practice in a fee-for-service model to make it work.

JGIM: How can you change primary care reimbursement to support programs like the IOC?

Dr. Batal: I think reimbursement needs to be more on a population level. This allows clinicians to take a step back and say, 'okay, we have this group of patients that we're taking care of. How should we use our resources to provide the best health for the population?'

JGIM: Do you think that health plans could have a role in funding programs like the IOC in settings where provider groups do not accept financial risk for populations?

Dr. Batal: Absolutely. It's in the health plan's interest to promote programs like this. But it will probably work better if it is based within the primary care delivery system, not at the health plan itself. (Though I do believe there is a role for case management done through the health plan, particularly when the patient is changing care settings.)

JGIM: You mentioned before that the IOC is managing a bit less than half of a percent of the total adult population. Is this the right percentage? You obviously can't manage everybody like this, but if you enroll too few, you may not have an impact. Do you have a sense for where the sweet spot is?

Dr. Batal: That's an interesting question. I'd like to think we found the sweet spot because we're showing the financial benefit. But if you take on a different population of patients, they might have more super utilizers or less super utilizers. So perhaps the proportion that is right for a high-utilizer clinic might be different.

JGIM: Well, Dr. Batal, I'm impressed. Congratulations on a great program and most importantly for sustaining it after your grant funding ended. Before I let you go, I do have one final question for you. What advice would you give to a health system that wants to initiate a high-utilizer program like the one you developed?

Dr. Batal: It may sound cliché to say, but I think a big part of our success was having the attitude that we were just going to figure out a way to get the program started and would learn along the way. We knew it would be messy and that it wouldn't be perfect. But we decided just to get going.

JGIM: I think that's a great point. We spend so long planning out programs in health care and things never work out the way we plan it. Sometimes the best way to learn is to just do it and make mistakes.

Dr. Batal: Yes, absolutely. Being able to make mistakes and having the space to do that. And that it's ok to go into projects like this with some humility and say, 'We have a lot to learn from everybody else who has done this before. In fact, maybe we can take what others have done and put it together in a way that works for us.' That's really what we did here at Denver Health and it was a lot of fun.

Picture 2 Intensive Outpatient Clinic Team Meeting.

Picture 3 Dr. Jeremy Long, Team Leader, Intensive Outpatient Clinic, confers with a patient.

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