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# Process Therapy

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*Over a year ago, the author suffered a spinal cord injury that required surgery, an extended hospital stay, therapy, and a trip into the medical sub-culture. This article looks at process improvement and relates it to the author's experiences recovering from his injury. If an organization's process is injured, process therapists using the diagnostic and treatment tools at their disposal can help lead an organization to recovery.*

In June 2003, I suffered an unusual spinal cord injury. A blood vessel burst inside the cord on the first day of a three-week vacation in Alaska. I ended up in the hospital in Anchorage and then was flown home to Kansas City. The author promises this will not deteriorate into a maudlin journey of self-discovery, but if it does, readers are encouraged to send angry messages to the author.

The initial diagnosis was pretty grim. It looked like I would be paralyzed from the waist down, but after flying home and having surgery to remove the resulting blood clot from the cord, the diagnosis changed. I started to hear things about taking small steps, measuring progress and focusing on continuous improvement with no certainty of the end result. It sounded very familiar.

At work, I have served as a member of the Software Engineering Process Group (SEPG) for the last 10 years. Suddenly, I had to apply all the tools from my role as an SEPG member to myself. Talk about a rude awakening! Before this, I could tell other people what was wrong and leave them to fix it. Now, I actually had to do all the things I told other people to do.

I found that the therapy process involved in recovering from physical injury maps closely to the process involved in healing an organization's process injury. A therapist's tools of empathy, encouragement, humor, challenge and success in the achievement of others fit a process improvement change agent's role perfectly.

This article will show how planning, a good therapist, collaborative effort and measurement all play a role in helping organizations recover from a process injury.

## Background

Before my injury, I ran, played softball, and played soccer. My wife and I spent our annual vacations camping and hiking in national parks. Suddenly everything changed. I received a sudden shock that a system or a process could break down unexpectedly. Organizations that have successfully put out software can experience the same thing when they see results slipping, experience a major system crash, suddenly

miss a major deadline or lose a customer. That's when the questions start: What happened? Wasn't everything okay? How could that happen? Why didn't I see any signs?

## Diagnosis

The first thing to do in the case of an injury is to diagnose what happened. In my case, that involved MRIs, CT scans, and surgery. For an organization, a process assessment and a process improvement model are needed. In the case of a physical injury, doctors compare diagnostic results with the models they have of how the human body should work. The Capability Maturity Model® (CMM®) for Software and CMM Integration<sup>SM</sup> provide models of how an organization should work. The diagnostic tools associated with each of these models are the assessment methods. At first, expert diagnostic help is important. However, an organization should not rely entirely on outside help. It should train some of its own people in the model and provide them experience in using the assessment methodology.

Assessments can be formal or informal. In the initial stages of diagnosis, an informal assessment can provide a good first look at identifying problem areas. Rather than focus on the process improvement models, an organization should focus on its problems. By addressing the problems, satisfaction of the selected model comes more naturally. As I started to get some function back in my legs, I did not need to know that I had inadequate ankle dorsiflexion. I needed to know the exercises to strengthen the muscles that bend my ankle. The models are best used as references to help address problems.

## Treatment/Therapy

Immediately following my surgery, I began a long road of therapy to literally get back on my feet. It was obvious from the beginning that my doctors and therapists had a plan for my recovery. Once again, it all sounded very familiar to me. In fact, one day my boss was visiting me when my therapy doctor came through. The doctor explained that they established a scoring chart for therapy patients to evaluate when they were ready to go home. He also stated that he and I would

meet weekly with the head nurse, my insurance caseworker, and my occupational and physical therapists. The meeting would review every aspect of my case and update my score against their plan for my recovery.

My boss said, "Don't get him started." After all, our SEPG had been the one to encourage meeting management and using metric information to make decisions. I think he was afraid I might try to improve the hospital's processes.

The need for process therapy often stems from a trauma of some kind. An organization's immediate reaction is that the situation needs to be fixed. This might create a flurry of activity that is short-lived if a quick fix is found. The key for the process therapist is to find the underlying reasons for the trauma and address them. By doing this, the therapist can build a foundation for long lasting improvement.

My therapy began immediately with an evaluation by both therapists. Each of them measured what I was physically capable of doing before we got started. This gave them a baseline of what to expect and provided a mark against which they could compare my improvement. It bore great similarities to taking an initial snapshot of where a project stands, as determined by the *diagnostic* assessment, before embarking on rehabilitating its processes. The therapists had a target goal in mind, just as an organization often has a target maturity level or performance goals. As change agents, the therapists laid out a series of steps to get me on the right track.

Process therapists must also focus on the steps an organization needs to build lasting improvement and reach improvement goals. Whether those goals relate to a maturity level or a performance goal, a planned approach to addressing specific items is critical. Sometimes these items are not directly related to the process improvement model. Often they involve related organizational issues that affect how the change will happen.

In my case, learning to get dressed was the issue, but I needed to improve my flexibility before I could do certain things. Just

<sup>SM</sup> CMM Integration is a service mark of Carnegie Mellon University.

like an organization, I resisted. It took some patience and some prodding on my therapist's part, but I got to where I could stretch as needed.

Process therapists need to use the same kind of sometimes gentle, sometimes firm persuasion to keep an organization moving towards reaching its goal. They also need to look for the underlying reasons for the resistance. The unwritten rules or norms for the organization can come into conflict with the process improvement goals. The process therapist needs to be prepared to deal with any covert resistance.

Open resistance is easier to identify and to address. Covert resistance can sabotage improvement efforts. Unexpected results often highlight covert resistance. Process therapists should monitor results and actions after process improvements are agreed upon and implemented.

A key item that had to be in place was my desire to get better. For process improvement to work in an organization, the organization has to want to change. In my recovery, I had to mentally accept that I needed to change, and I had to focus on getting better. It is the same for an organization. The organization needs a manager who understands the need and sees the benefits of change. By identifying such a champion, the organization will ensure itself of future improvement. The champion can help the therapist overcome resistance by enforcing agreements and voicing commitment to the improvements.

A therapist always likes a willing patient and can use that patient to show others the way to succeed. Unfortunately, not everyone wants to get better. Some think the status quo is fine or the therapy is too hard. That kind of thinking leads to resistance. Resistance comes from a variety of sources and the therapist has to be ready to respond. There were times I resisted my therapists, but they were few. That helped me succeed in my recovery.

I saw a number of patients fighting against their therapists or not doing the work between sessions that the therapists encouraged. As a result, their recovery did not progress as far as quickly. This was evidenced by false starts and repeating the same exercises over and over again. Organizations can see the same kind of results. False starts plague improvement efforts that do not have the necessary champion or commitment to change. The therapist needs to set up an improvement regimen and stick to it. Even if the organization wants to resist, the therapist must continue to exhibit the desired behavior and stick to the plan.

A little challenge can be a healthy thing

for the patient. Process therapists need to challenge the organization to keep going one step further to ensure continuous improvement. A challenge can also help push an organization through plateaus. My physical therapist was sometimes subtle; when we would walk, he would stay just ahead of me to make me pick up my pace and try harder to keep up. I knew what he was doing, but it worked anyway.

Process therapists need to find ways to keep the organization moving forward. Regular appointments with managers provide important opportunities to discuss treatment and review progress. It is vital that the process therapists talk to people within the organization and look at measurement data to gather information to present to management. It helps to identify the key issues for a manager and use them to find a way to keep the organization focused on improvement. If a process therapist can find ways to address those issues or provide information about them, a manager will pay close attention.

Another important thing for the patient and the organization is to check their pride at the door. During my hospital stay, it seemed like everybody got to see or know about everything. I had no secrets by the time I left. One nurse tried to make small talk while we worked our way through the situation. It turned out that I worked with her husband. Great! All I could say in that awkward and uncomfortable moment was, "Oh ... uh ... tell Steve I said 'Hi!'"

Organizations will have those embarrassing moments too. An organization will find things out that it did not want to know. The organization may find them out in front of a senior manager. At those times, the process therapist must be supportive and help the organization work through the situation. The difficult times can lead to frustration when a patient will want to shut down. The therapist has to anticipate these situations and plan how to address them. It may come down to helping an organization gather data so it is better prepared when facing a potentially embarrassing situation. If the process therapists can help an organization find out some fundamental information about itself, they can help it use that information to its advantage.

Lastly, the process therapists should be willing and able to demonstrate the desired behavior to the patient to speak from experience and show empathy for what the patient is facing. A good place to start is meeting management. Many organizations suffer from free-form stream of consciousness meetings that lead nowhere. Process therapists should encourage good meeting behavior by using agendas and meeting min-

utes for any meeting they lead. By demonstrating the desired behavior, a process therapist can influence the organization.

## Summary

After my injury, I recognized that I was going through all of the stages I learned to look for in an organization when trying to bring change. Recognizing the similarities between my life-altering event and my work helped me get some ideas for improving myself based on what I had learned bringing improvement to my organization.

Process therapists should look for ways to help an organization improve, just like the physical therapists helped me. The recovery starts with the diagnosis of the problem and a plan to address it. From there, the therapist has to know their patient and create ways to effectively target the small steps in improvement. Throw the model away for a while because the technical terms can scare off a patient. Use terms the patient knows. Talk about problems, not the model's jargon. The achievement of process improvement goals requires buy-in by the organization and persistence by the therapist. If the organization resists or suffers some embarrassing setbacks, the therapist needs to find creative ways to work through them. Above all, a therapist must demonstrate they know the problems and can empathize with the patient. ♦

## About the Author



**Paul Kimmerly** has 16 years experience in software development for the different incarnations of the Defense Finance and Accounting Service Technology Services Organization. A member of the Software Engineering Process Group since 1993, he currently serves as the group's chair. Kimmerly is an authorized Capability Maturity Model® Integration<sup>SM</sup> Assessment Method for Process Improvement Lead Appraiser. He has written several articles on process improvement for CROSSTALK.

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