

# **We All Fall Down**

## Goldratt's Theory of Constraints for Healthcare Systems

by Julie Wright and Russ King

When I first tried to read Eliyahu Goldratt's book, *The Goal*, I couldn't get through it. It was about improving throughput in a manufacturing plant. Since I'd never worked in manufacturing, I just couldn't translate it into a service business. It made no sense to me.

In *We All Fall Down*, the authors attempt to bridge that gap between manufacturing and healthcare. It's a novel about Beth, a bed manager, attempting to increase throughput in a 500-bed British hospital. Because of the National Health System, British hospitals run near full capacity. U.S. hospitals census ebbs and flows. Both peak in the winter flu season.

Because the hospital runs at 98% of capacity, there's always a shortage of beds causing cancelled surgeries and other issues. The constraint appears to be beds, but upon further analysis, Beth finds that policies are forcing her to put patients in any available bed instead of a nursing unit suited to their needs. Surgical patients end up in medical units and vice versa. This causes doctors to commute all over the hospital to do their rounds. In a 500-bed hospital, commuting can devour a doctor's time. This causes delays in discharge which further reduces the number of available beds.

From a Lean perspective, this is unnecessary motion. Lean and Theory of Constraints (TOC) offer two slightly different ways of looking at improvement. I think of them as different maps to the same territory.

### **Hospitals are Complex, but Problems are Simple**

Goldratt's premise about TOC is that systems are complex, but problems are simple. They congregate at bottlenecks. Fix the bottleneck; fix the system. Goldratt also believes that people want to do a good job, but the system prevents them from doing so.

**What is the Goal?** Maximize *throughput* while minimizing inventory and operating expense.

While Beth is struggling to find the root cause of throughput problems, she has to wrestle other managers, doctors and knee-jerk improvement projects. See if you recognize any of Beth's findings:

- Too many improvement projects fail to deliver
- Potential negatives and objections are overlooked
- Staff have seen it all before

Meanwhile, Beth has to figure out how to present her findings in a way that can't be dismissed. See if you recognize any of the Six Layers of Resistance Beth faces:

- I don't accept your agenda
- I don't agree about the problem
- I don't agree about the solution
- I don't accept the benefits you claim
- I don't think you've identified all of the negative side effects
- I don't think you can overcome the obstacles to implementation
- I'll agree, but I won't play

One of the most interesting parts of this book is how Beth structures her presentations to various stakeholders to gain their agreement. Beth argues that doctors and nurses spend years learning how to link symptoms back to causes, but have not done this in the management of healthcare. Her presentations build a cause-effect chain that brings participants to the same conclusions she has reached.

If you want a taste of TOC as it applies to healthcare and can overcome the slight differences in language and application, this book will help you grasp the essence of TOC as it applies to healthcare.

### **Emergency Department Example**

Every Emergency Department I visit has a waiting room and one triage nurse. As the waiting room starts to fill up, the triage nurse becomes the bottleneck. The exam rooms can be ready and waiting, but patients only arrive at the speed of the bottleneck—the triage nurse. What if the nurses waiting behind the doors of the ED stepped in to pull more patients in from the waiting room? (Invest in the constraint.)

### **The Theory of Constraints consists of five steps:**

1. **Identify the constraint.** All businesses, including hospitals, are chains of systems. The constraint is the poorest performing link in the chain.
2. **Exploit the constraint.** (Optimize its performance.) Break "dummy" and "policy" constraints.
3. **Pace every other process to the speed of the constraint.** (Reduce overproduction, work in process (e.g., patients waiting), inventory, etc.)
4. **Invest in the constraint.** If production is still too low, invest in reducing the constraint (e.g., double the number of people or machines performing the constraint process).
5. **Repeat** until you get the desired performance. (There may be a new constraint.)

[www.qimacros.com/lean-six-sigma-articles/theory-of-constraints/](http://www.qimacros.com/lean-six-sigma-articles/theory-of-constraints/)  
[www.qimacros.com/Champion-Training/theory-of-constraints.html](http://www.qimacros.com/Champion-Training/theory-of-constraints.html)

We all fall down! Walk, gallop, tiptoe, hop, and twirl in this fun and active song for children. More fun Stuff... Walk around the circle. Walking, walking. We all fall down. Gallop! Gallop around the circle. Gallop around the circle. Galloping, galloping. We all fall down. Shhh! Let's tiptoe! We All Fall Down is the 3rd and final DLC for We Happy Few. Playing as Victoria Byng, it focuses on the city of Wellington Wells itself, its society, its history and why the Executive Committee decided to build the city into what it is in 1964. It was released on November 19, 2019 and is also part of the We Happy Few Season Pass. Victoria Byng is the playable protagonist of We All Fall Down. The teasers show that the DLC takes place after she manages to escape from Ollie Starkey in Act III and will We All Fall Down may refer to: We All Fall Down (Brian Caldwell novel). We All Fall Down (Robert Cormier novel). We All Fall Down (Eric Walters novel). "We all fall down", a line from the nursery rhyme "Ring a Ring o' Roses". We All Fall Down (1997 film), a 1997 Italian film starring Anita Caprioli. We All Fall Down (2000 film), a 2000 Canadian film starring Helen Shaver. We All Fall Down, a 2005 film starring Carly Schroeder. We All Fall Down, a 2005 film starring Tara Killian.

Remember, nobody can always be strong We all fall down. I will catch you, never let you go I won't let you, go through it alone So don't feel left out, we all fall I will lift you, high above the rain I'll be with you, we all feel the pain So don't feel left out, we all fall down We all fall down Everyone breaks. You'll get hurt sometimes, in this life You fly so high, you crash and burn sometimes And I want you to know, you are not alone We all fall down (we all fall down) I will catch you, never let you go I won't let you, go through it alone So don't feel left out, we all fall I will. lift Share this Rating. Title: We All Fall Down (2016). 2,7/10. Want to share IMDb's rating on your own site? When Kirby Lane's SUV breaks down in the middle of the desert, she must overcome the dehydration, coyotes, and lurking undead to find her way home. Directors: Bob Schultz, Robert Conway. Stars: Whitney Moore, Kevin Tye, Clint James.

We All Fall Down may refer to: We All Fall Down (Brian Caldwell novel). We All Fall Down (Robert Cormier novel). We All Fall Down (Eric Walters novel). We All Fall Down (Daniel Kalla novel). "We all fall down", a line from the nursery rhyme "Ring a Ring o' Roses". We All Fall Down (1997 film), a 1997 Italian film starring Anita Caprioli. We All Fall Down (2000 film), a 2000 Canadian film starring Helen Shaver. We All Fall Down, a 2005 film starring Carly Schroeder. Share this Rating. Title: We All Fall Down (2016). 2,7/10. Want to share IMDb's rating on your own site? "We All Fall Down" has a relatively small cast ensemble, so the actors and actresses in the movie had to carry a bigger weight in order to make the movie work. And I will say that most of the performances in the movie were actually quite good. The characters in the movie were nicely detailed and fleshed out. We all fall down! Walk, gallop, tiptoe, hop, and twirl in this fun and active song for children. More fun Stuff... Walk around the circle. Walking, walking. We all fall down. Gallop! Gallop around the circle. Gallop around the circle. Galloping, galloping. We all fall down. Shhh! Let's tiptoe! We All Fall Down is the death song and the musical Easter Egg for the zombie map Die Rise. [Bridge] It will end in flashes And we'll choke on ashes And we'll all fall down. [Verse 3] Long live the phantom I hear him sing and scream out his anthem I feel the shadows Crying Running Coming For me Too dark To see. [Hook] We all fall down We fall down We all fall down We fall down. [Bridge] It will end in flashes And we'll choke on ashes And we'll all fall down. [Verse 4] It will end in ashes of their lies We can still see flashes in our eyes But until it crashes And the atom smashes All our minds will just fade away. [Bridge] It will end in flashes And we'll cho Down on your luck you're feeling small The little things seem 10 feet tall Watch your dreams fall apart at the seams. You want to scream and shout out loud When you sit up they knock you down You're a long way from home But you're never alone, yeah. Climb every mountain How high doesn't matter Don't ever be afraid to fall Walk out on that wire Climb every ladder Keep your back against the wall And don't be scared to hit the ground 'Cause we all fall. We're all digging in this dirt We're all living hand to mouth We're all trying to fit in Trying