

THE CROOKED WAY

The way in which doctors are trained is intense and effective. We are taught to use linear thinking to become proficient and precise when providing medical care. We are told *this is how you do it*, and we do it. We make one move and expect a correlative outcome. Such linear thinking requires a smooth path—one that does not easily accommodate the uncertainties that mistakes bring.

Linear thinking may work in some settings, but it can be challenging for those of us who strive to be innovative. If we expect the path of developing something new and disruptive to be a straight line that follows a sequential order, we will have a hard time innovating.

In order to effectively develop and implement innovations in a health care setting, first we must accept that development and implementation are not always separate, so products must be malleable. Second, the path we have envisioned will change, and sometimes the destination will, too. Perhaps the toughest fact to accept is that we don't know what we don't know—problems will arise from sources we didn't know existed.

Critical thinking allows us to conceptualize a way to navigate this unclear path using rationale, reason, and empathy. It allows us to take in the evidence around us, to consider all of the factors—including human behavior—and to use reasoning to guide our decisions so that we can move forward with confidence while remaining open to change. Most important, critical thinking allows us to reevaluate our assumptions when



we are wrong and to use our mistakes to inform our future decisions.

Innovation requires us to go around in circles, adjusting at each pass. Unlike linear thinking, critical thinking is effective in this cyclical process. The continued advancement of technology across every aspect of health care is bringing more opportunities for massive disruption. Critical thinking will be key to ensuring that we capture the full potential of innovation, and it is a skill we must all embrace.

It can be difficult to think critically and even harder to know if we are fully embracing the concept, or if we are unknowingly allowing preconceived notions to sway our decisions. Using critical thinking effectively requires us to look at ourselves and our work objectively through unbiased eyes.

Interventional glaucoma is a new way of thinking about one of the leading causes of blindness, even in the developed world. Reaching this point in the journey has required a critical and analytical approach to thinking about the way things have always been done. We have come a long way over the past few years (I get less flack now ... at least to my face). But the path in glaucoma therapy is surely to change, as may the destination. ■

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