

System Safety in Healthcare

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How Does Unsafe Work Originate in Patient Care?

Unsafe work practices can happen in many ways. The following lengthy list includes examples of potential causes:

- Excessive work for clinicians
- Too many unnecessary reports and requirements
- Over-dependence on technology
- Conflict between the need for professional autonomy and establishing the dynamically changing best processes
- Care delivery “silos” resulting from lack of inter-departmental teamwork
- Constant distractions and interruptions
- Too many policies and procedures, leading to a tendency to follow marginally effective methods
- Over-reliance on electronic medical tracking taking precedence over bedside discussions with patients
- Inattention to detail
- Lack of motivation to get, or resources for, a second opinion
- Quick diagnosis based on past observations
- Inadequate attention to medical equipment dangers
- Insufficient effort in infection prevention
- People pretending the negative would not happen to them
- Hospitals looking for quick profit
- Questionable alternate boards certifying physicians who may not be qualified
- A lack of passion for work
- Unfavorable workflows, such as labs located far from the emergency department
- A lack of clarity of what is required to assure patient safety
- Too much team consensus instead of challenging the quality of intervention

The researchers responsible for this list have a system-level hypothesis [Ref. 1]. They see patient

safety as similar to two parts of an iceberg: a visible, mechanistic part, where an individual is blamed for errors (the tip of the iceberg) and a system part that is not visible (the majority of the iceberg). If an iceberg can be seen as a system, some of its parts are seen only by those who swim beneath the surface of the water — and no one can see all the parts. Since different swimmers see different components of the system, the components are highly uncoordinated, resulting in a broken-down system.

Why Do we Sustain Unsafe Work?

The larger question is, why we are so *indifferent* to unsafe work?

Joel Arthur Barker gives us a convincing explanation in his book *Paradigms: The Business of Discovering the Future* [Ref. 2]. He divides the rate of problem solving in three waves as shown in Figure 1.

At first, progress is slow because a new problem-solving technique comes up and not everyone is a believer. It takes time to train and to prove the technique works. The second wave shows the rate of problem-solving is increasing; it now becomes almost a “religion”

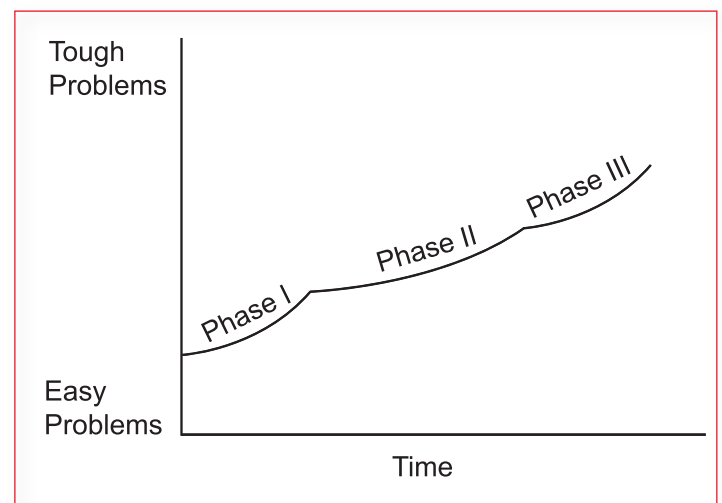


Figure 1 — Three Phases of Problem Solving.



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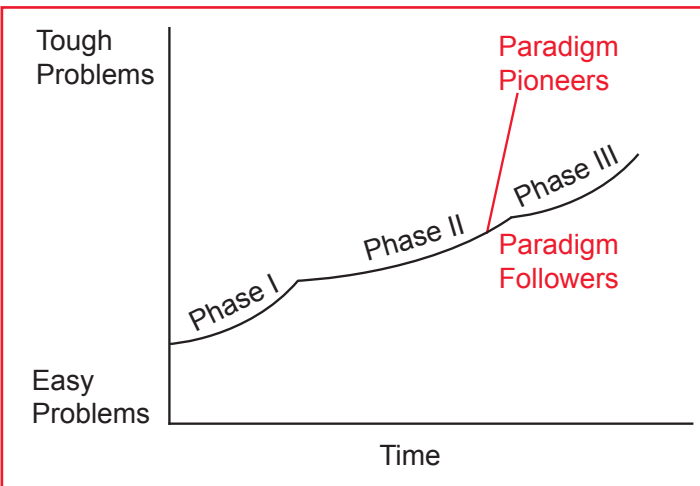


Figure 2 — The Paradigm Pioneers Break Out and Capture the Market.

— such as in the case of Six Sigma. There is good progress, but it is mainly taking care of easy problems.

Then, the rate slows down in the third wave because tough problems are taking too long or we don't have the techniques to deal with them. The second wave is where laid-back professionals are comfortable because

they are showing progress in problem solving, even though the return on investment (ROI) might be hardly five percent. In a competitive world, such organizations eventually have to give up their leadership to those who break the rules and create a new paradigm, as shown in Figure 2. Joel calls these people “paradigm pioneers.”

Hospitals can get stuck in the second wave by default because patients need to go to the nearest hospital in an emergency. Federal and state governments have the authority to shut them down, but this is rare.

Despite limited competition, however, there are paradigm pioneers — even in healthcare.

These paradigm pioneers attempt to break out and capture the market. What distinguishes them from those who are satisfied with the status quo, says Barker, is that “the paradigm pioneer must have courage as well as intuition.” He has a point. Traditional techniques depend on logic and data analysis. One can argue that you always need data. However, the challenge lies in recognizing the flaws and looking outside the box for solutions and improving outcomes, even when data may be incomplete. ●

References

1. Singh, R., et al. “Building Learning Practices With Self Empowered Teams for Improving Patient Safety,” *Journal of Health Management*, Vol. 8, No. 1; pp. 91-118, 2006.
2. Barker, Joel Arthur. *Paradigms: The Business of Discovering the Future*, New York, HarperBusiness, 1993.
3. Raheja, D. *Safer Hospital Care: Strategies for Continuous Innovation*, Boca Raton, FL, CRC Press, 2011.