Fixing Healthcare Delivery

Dr. Fred Southwick

Course Requurements

- Read the chapters assigned in the textbook. We recommend you read the textbook before watching the videos.
- Complete all 8 modules, complete multiple choice questions
- Personal improvement plan and driver diagram.
- Quality improvement project to be implemented during residency.
- Attend a the 6 virtual Canvas conferences to discuss the guiding questions and your projects.

Optional. If you would like to see quality improvement in action, you can round with Dr. Southwick and Clinical Nurse Leader Kelly Jaobitz 1 x per week on North Tower 64 and interview patients about their hospital experiences. These interviews will personalize the lessons you are learning.

To encourage active learning guiding questions are included in the book and as part of the syllabus. Be sure to answer the questions **in bold** and be prepared to discuss these answers during our virtual conferences.

To begin the course read Chapter 1 of Critically III and then go to the Modules on the left hand toolbar and begin Module 1:

1. Introduction to systems and the course (Module 1 and Chapter 1)

Guiding Questions:

- Is our health care delivery safe? Why or why not
- What happened and what should have happened during the course of Mary's illness?
- What is a system? What are some systems that you encounter every day?
- What does an ideal healthcare system look like?

Questions to prepare for your virtual conference:

Have you, a friend or a family member experienced a preventable medical error in the hospital of clinic? Or alternatively describe an experience that went very well.

- Describe what happened. Why did it happen? How could their problems have been prevented? Or if you are describing a positive experience, what happened? Why did it work so well? Could your or your family's experience have been even better?
- Do you believe this episode was caused solely by an individual or was it caused by defects in one or more systems? Or if you are describing a positive experience was it due to one individual or was it due to an effective system? What attributes of STEEEP were present and absent?

2. How can we apply manufacturing and athletic principles to improve patient care? (Module 2 and Chapter 2) In addition to Toyota, be sure to read about Southwest Air and Publix and be prepared to discuss what lessons healthcare can take from these companies.

Guiding Questions:

- What we can learn from high performing manufacturing companies?
 - Toyota Production System
 - What is meant by pull and push manufacturing models?
 - What are value streams, and why are they important?
 - What is the 80/20 rule?
 - What is meant by slice and dice
 - What do we mean by sequential versus iterative care? Why is it important to know the difference?
 - What are the 8 ways Toyota eliminates waste?
 - How do we establish continually improving systems to enhance flow and reduce waste?
 - Carefully designed protocols for all work
 - Create highly functional customer-supplier relationships
 - Empowering those on the frontline to learn from past performance, generate ideas for improvement, and to test them.
 - See how Toyota "associates" prevent errors from ever becoming defects by inspecting each added part at every step in the assembly process.
 - Southwest airlines
 - How are Southwest airlines crews able to reduce airplane ground time to ½ of that of their competitors?
 - What leadership model do they use?
 - What is meant by a unit based administrative structure?
 - Publix Supermarkets
 - Why is shopping at Publix such a pleasure?
 - What are their secrets to customer satisfaction?
 - Could we emulate these approaches in healthcare?

Questions to prepare for your virtual conference:

- In your own life, is everything you do of value in achieving your goals? Remembering the 8 forms of waste, list ideas for how you could reduce waste in your life.
- Describe several of your customer-supplier relationships either at work, at home or at school? Could they be improved? If so how?
- 3. Teamwork is the key to high quality health care delivery. (Module 3 and Chapter 4)

Guiding Questions

What are the advantages of team care over individual care?

- What are the key conditions for creating an effective team?
 - 1. Compelling goals
 - 2. Sufficient structure
 - 3. The right people on the team & appropriate boundaries
 - 4. Sufficient resources & rewards
 - 5. Coaching
- What are the 3 key principles for effective teams and how do these principles relate to TPS?
- What are the 8 steps for launching a team, and why are they important?
- What should team members never do and what should they always do?
- What is meant by groupthink and how do we avoid it?
- In designing work how do we improve the quality of a job?
- Can teamwork bring joy to work?

Questions to prepare for your virtual conference:

- Have you played on a team? Describe how your team functioned. Did the team have sufficient structure? Were there team norms? What things would team members always do and what were they never supposed to do? What problems did you encounter? Apply knowledge from this week's class to suggest ways your team could have been improved.
- Describe your vision of the ideal healthcare team. What goals should the team have? Who would you pick for your team and why? What norms of behavior do you think are most important? If you were the leader of the team how would you like the team to come to decisions?
- 4. Human Errors Part I We all must understand human errors and create strategies to prevent errors in order to improve patient safety. (Module 4 and Chapter 3)

Guiding Questions

- How do we define quality?
- How does Swiss cheese relate to medical errors?
- What are some of the conditions that increase the risk of medical errors?
- How is reliability calculated, and what do we mean by Six Sigma?
- Is 99.9% reliability good enough for health care delivery?
- What tools are available to improve reliability and reduce errors?
 - What do we mean by
 - Root cause analysis (RCA)
 - Plan, do, study, act cycles (PDSA)
 - Driver diagrams
 - Failure Mode and Effects Analysis (FMEA)
 - o What do we mean by a forcing function?
 - o Can checklists help, and how do we design them to maximize their effectiveness?
 - o What is a patient care bundle?
- What do we mean by second victims?
- Why is transparency important for health care organizations?

Questions to prepare for your virtual conference:

- Propose a personal improvement project by first creating a driver diagram and then creating a PDSA cycle and answering the questions below. Please email the completed Module 4 student exercise to your instructor and be prepared to discuss your improvement plan in our virtual conference.
- What condition would you like to improve in your life? (lose weight, get more exercise, eat healthier, devote more time to family, read more books, take more Coursera courses)
- To better understand why you have not achieved this aspirational goal first fill out the blank driver diagram. Be sure to include potential solutions for each secondary driver and prioritize them (for an example see Dr. Southwick's driver diagram in Module 4

explaining why his conversations with his wife were poorly received)

Accessibility score:

Medium Click to improve

Accessibility score: Medium Click to improve <u>Driver Diagram Template.pptx</u>

Actions

- After completing the driver diagram answer these key questions:
 - What am I trying to accomplish?
 - What change can I make that will result in an improvement?
 - Describe the implementation of your new change.
 - How will I know my change is an improvement? Show your measure of the effectiveness of your intervention and assess whether you believe your change represents an improvement.
 - o If your preliminary plan was successful describe an additional strategy that you can implement to reach your goal. If your intervention did not result in a measurable improvement what new intervention will you try?
 - Plan out a change, try out the new change, measure the effectiveness of the intervention, and if it worked plan an additional improvement process to further enhance your ability to achieve your goal. You can use the IHI PDSA template to

help guide you in your quest. Accessibility score: Medium Click to improveQIToolkit PDSAWorksheet.pdf

Actions

- 5. Human Errors Part II (Module 5 and Chapter 3) Guiding Questions
- What is Deming's famous "red bead" experiment and what can this teach us about patient safety?
- How do we differentiate random events from events due to specific causes?
- What are run charts and control charts and how can they help to guide us in assessing quality improvements?
- How should health systems and caregivers manage patients who are harmed?

Questions to prepare for your virtual conference:

Recall a recent error you have made. What factors made your error more likely? Perform a root cause analysis and apply a driver diagram to help explain the underlying causes of your error. Based on your analysis do you have a plan for preventing this error from recurring in the future?

- 6. A new type of medical leadership is required for modern health care. (Module 6 and Chapter 5 and 7)
 Guiding Questions
- Fundamental traits of effective leaders
 - o What skills should they possess?
 - o What personality traits are important?
 - o Can leadership be taught?
- Distributive leadership,
 - o Why do we need to empower everyone in our health care system?
 - o How do we create a trusting environment?
 - O What is meant by a zone of safety?
- Adaptive leadership
 - O What makes an adaptive leader?
 - o Why are adaptive leaders frequently fired or sidelined?
 - o Why do we need adaptive leaders in healthcare?

Questions to prepare for your virtual conference:

- Is there leader who you admire? What was it about that person that you found most remarkable about their leadership?
- Are you an adaptive leader? Why or why not? Describe one adaptive change that you would like to see implemented? Can you help to lead this change? Why or why not?
- 7. How do we change the culture of our healthcare systems? (Module 7 and Chapter 6)

Guiding Questions

- Who was Samuel Adams and why is he important to the United States and to healthcare?
- Who are the key constituencies in healthcare, and how can we encourage them to actively improve healthcare?
- How are one-on-one meetings used to change a culture?
- What do we mean by personal narrative? What are the story of self, the story of us, and the story of now?
- Why is touching the heart critical for recruiting campaign participants?
- What is the Roger's innovation diffusion curve and how can it be used to guide strategy?
- What leadership model is most effective for campaigns?
- How do we best identify new recruits and how should they be managed?
- How do we assure true commitment?
- What is the difference between strategy and tactics?
- What are the ideal components for an effective action plan?
- Why are performance milestones important?
- How do we know if our campaign was successful?

Questions to prepare for your virtual conference:

- Have you been involved in or observed a campaign in the past? Please share your experience. Did your campaign or the successful campaign you witnessed use the 4 approaches of Samuel Adams (one-on-one meetings, personal narrative, large gatherings, the generation of strategies and tactics through a leadership team that led to action). Was the campaign successful or did it fail. Tell us why it succeeded or failed. Share websites or other campaign material.
- If you have not been involved in a campaign please comment one of the 4 videos. Have you ever encountered a leader like Samuel Adams? If so please describe him or her. Do you agree with my assessment of the main healthcare constituencies? Have you ever used one-on-one meetings to recruit someone to work with you? If so share your best practices. What worked and what failed? Are there specific strategies or tactics that you have found to be particularly helpful in healthcare? Where do you think these organizing methods could prove to be most effective in healthcare?
- 8. Action plans for fixing health care and summary of the course. (Module 8 and Chapter 7)

Guiding Questions:

- Immunity to change
 - O Why do we resist change?
 - What is meant by underlying assumptions, and how do we overcome them?

Questions to prepare for your virtual conference:

Describe a project you would like to initiate to improve healthcare delivery by answering the questions below in detail. Please email your answers to the instructor at least one hour before the virtual conference and be prepared to discuss your plan during the conference.

- Why are you passionate about this project?
- What is your measurable goal or goals?
- What will be your milestones or time line? (remember the campaign time line for Samuel Adam's campaign?
- Where do you want to conduct this project and why do you feel this is the best site?
- Who will be your primary constituency? Who will you recruit to your project and how will you recruit them?
- Outline your preliminary strategies and tactics.
- What challenges do you anticipate encountering? Understanding the three faces of power, how will you overcome them? Are there other challenges you should anticipate?
- Please describe your preliminary plan of action.
 - <u>Accessibility score: Perfect Click to improveFinal Project</u> template.docx