Several key observations and learnings from a former biopharma executive

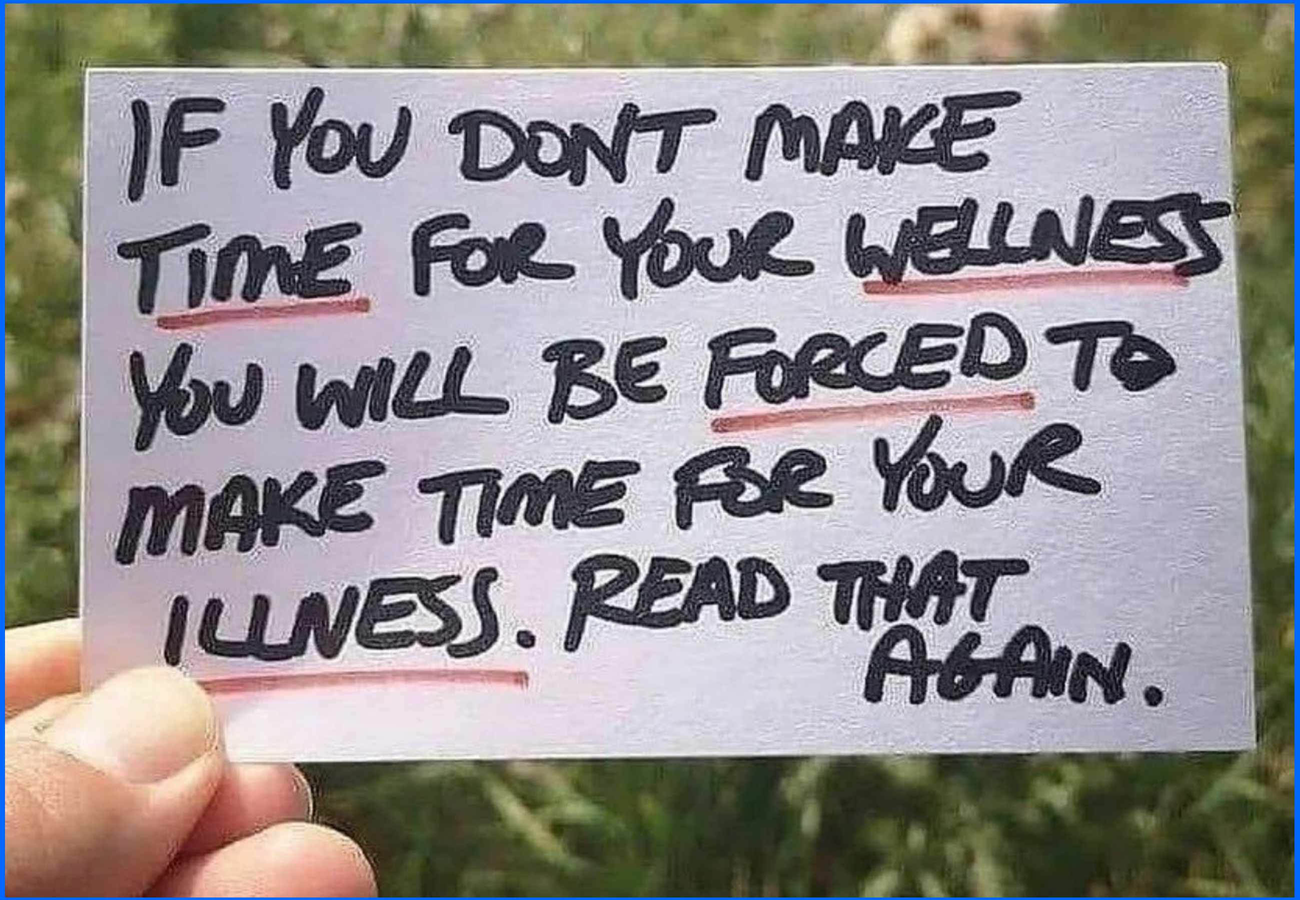
Rob Tenerowicz – Retired Senior VP Supply Chain Operations & Engineering…and gym owner

Topics

- Health and wellness
- Supply chain risk management
- Engaging the Operations workforce

Prioritize spending time on your health and wellness

You owe it to yourself and your loved ones



Why strength and conditioning training?

Improved quality of life, now and once you retire

- Prevent injury
- Maintain/improve posture
- Increase strength
- Reduce aches and pains
- Increase bone density
- Improve sleep quality
- *...the list goes on...*

How do you find the time to exercise?

Managing end-to-end supply chain risk

With a focus on things that are <u>not quite so obvious</u>

(won't be addressing periodic enterprise risk management reviews)

- **Defining the end-to-end supply chain**
- **Clearly define risks and impacts for the intended audience**
- **From where and when can risks arise? – examples**
- **Hire smart people: Underestimated key hires to help mitigate risks**
- **How do you uncover unanticipated risks?**
- **Which risks to mitigate, and which ones to not?**
- **YOU, as a supply chain leader, are ultimately responsible for managing end-to-end supply chain risk**

Defining the end-to-end supply chain
Where does it begin?

- Raw materials?
  - What does the term “Raw Materials” mean to you in thinking about the end-to-end supply chain?

Clearly define risks/impacts for the audience
Don’t assume they know what you know!

- Example: how much is enough inventory?
  - What happens if there is a disruption in production?

- A potential “risk” with SCRM software?

From where and when can risks arise?
Risks can arise from anywhere, at anytime, along the end-to-end supply chain

- Examples of potentially unanticipated risks
  - Analytical column – supplier discontinues
    - Don’t assume people will share risks: ”That’s the way we’ve always done it.”
  - Contract manufacturers – hiring spikes (PIP)
  - Specifications – regulatory agency negotiations
    - Lobby for a broader set of batches used in clinical trials

- Take responsibility for the entire end-to-end supply chain
  - Yes, others share the responsibility, but your mindset should be that it’s yours

- Supply chain risk management is a never-ending process

Hire smart people

Preferably smarter than you

"It doesn't make sense to hire smart people and then tell them what to do; we hire smart people so they can tell us what to do."

- Steve Jobs

Underestimated key hires to help mitigate risks

Experienced people in key roles can pay significant dividends and reduce risk

- **Procurement**
  - Ensure long-term quality supply
  - Reduce the amount of custom/sole/single-sourced materials
  - They pay for themselves in real savings, cost avoidance, and avoiding costly manufacturing changes
- **Logistics/Distribution**
  - Plans should include managing disruptions in the supply chain (pandemic?)
- **Product Supply Chain Owner – senior level**
  - Needed once products are advanced in development (late Phase 2?)
  - Works across manufacturing, quality, planning, clinical, commercial, regulatory, etc.
  - Full-time looking over the entire end-to-end supply chain – risks

How do you uncover unanticipated risks?

Everybody along the supply chain has a role to play in identifying and mitigating risk

- Develop a network of people who have sights on various parts of the supply chain and meet with them regularly – probe for risks
  - Procurement, Logistics/Distribution, PSCO
  - Project Team Managers
  - Directors of Manufacturing and Quality (internal and those managing external)
  - Leaders of Formulation/Process/Analytical Development
- Embed yourself within Operations – Engaging the Operations workforce (next topic!)

Engage your workforce at every level in Operations

Invest your time, it will pay dividends (use the ”Decline” button even more!)

- What level of support do you give your workforce?
  - The blast e-mail – “telling them, not showing them”
  - The walk-arounds or round table lunches – “the guest appearance”
  - Embedding yourself within your workforce – “showing them, not telling them”
    - Become a sponsor for a key initiative or a project team and repeatedly demonstrate you have their back
- By embedding yourself, you will notice a significant difference in the engagement level, the information openly shared (e.g., risks) and the usefulness of the broader workforce in supporting your overall risk management process…among many other benefits!

Which risks to mitigate, and which ones to not?

As a supply chain leader, you are best positioned to determine and recommend (but not in a vacuum)

- Several areas where proactive mitigation should be decided
  - Inventory
    - How much at each node of the supply chain?
    - Where is it located? Does it need to be dispersed?
  - How many single/sole-sourced raw materials can you tolerate?
  - Do custom materials and equipment put you at risk?
  - Where are your single points of failure along the supply chain and which ones should be mitigated?
- As new risks arise, work with others to assess the likelihood, the impact and the cost to mitigate and make recommendations
- Clearly communicate your recommendations and get endorsement from the C-suite – you're all in this together!

YOU, as supply chain leader, bear responsibility for managing end-to-end supply chain risks

You are the only senior leader that truly understands the risks, the impacts, the mitigations and the costs

- Consider where things can start going wrong in your end-to-end supply chain
- Ensure your audience understands each identified risk and the impact (the "risk" with SCRM software?)
- Risks can come from anywhere, and at any time, along the end-to-end supply chain – managing risk is a never-ending process
- Ensure you have experienced people in key supply chain roles
- Develop a network of people who have sights on various parts of the supply chain and meet with them regularly – probe for risks
- Engage your workforce at every level so they can be a key part of your supply chain risk management
- Get buy-in from the C-suite, because when things go wrong, and they will, you win as a team, and you lose as a team!

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