2021 ACR-RBMA Practice Leaders Forum

Scrum Methodology and Its Application in Crisis Management in Radiology

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Learning Objectives

- 1 - The presenter will discuss the benefits and pitfalls of using Scrum principles & practices to manage through crises using Charlotte Radiology/COVID-19 as a case study.

- 2 - The audience will understand the foundation and application of Scrum methodology to enhance teamwork, accelerate organizational efficiency and effectiveness, and deliver higher quality care.

Agenda

- **Introduction to Scrum methodology**
- Managing CR through Covid – A Case Study
- Lessons learned & next steps for Charlotte
- Key takeaways for Rad community

Two Approaches to Project Management (a)

- **Traditional, Plan-driven Approach** – The traditional plan-driven management approach emphasizes planning and control of the effort as well as centralized management decision-making controlled by a project manager to achieve some level of predictability over project costs and schedules.

- **Agile Approach** – A more Agile approach recognizes and accepts the level of uncertainty in the situation, emphasizes getting started quickly and is based on using an incremental and iterative approach to refine and further elaborate the solution as the project is in progress rather than waiting for the solution to be defined before getting started.

(a) https://managedagile.com/how-are-agile-and-the-coronavirus-related/

What is Scrum Methodology and Why Does It Matter?

Scrum is one of the agile methodologies designed to guide teams in the iterative and incremental delivery of a product. Often referred to as "an agile **project management** framework," its focus is on the use of an empirical process that allows teams to respond rapidly, efficiently, and effectively to change – **despite the uncertainty that may exist.**

Watch video on scrum methodology:

https://www.youtube.com/watch?v=TRcReyRYIMg

Definitions/Roles in a Scrum (a)

- **Project Owner**
  - Person with the vision of what you are going to accomplish. They take into account risks/rewards/what is possible.
- **Scrum Master**
  - Person who will coach the rest of the team through Scrum framework and help team eliminate anything slowing them down.
- **Team**
  - People actually doing the work. Needs to have all skills needed to accomplish Owner's vision (3-9 people is ideal).
- **Backlog**
  - List of everything that needs to be built or done to make the vision a reality – builds and evolves over the lifetime of the product – it is effectively the product road map – a list of everything to be done by the team.
- **Sprint**
  - A fixed length of time (less than a month). During sprint planning, the team commits to how much of the backlog they will complete and then sets their Sprint Goal.
- **Scrum Board**
  - A way to make the work visible by creating a board with "do/doing/done" where sticky notes represent items to be completed and the team moves them across the Board.
- **Daily Huddle/Scrum**
  - Every day, at the same time, the team and Scrum Master meet and answer three questions – What did you do yesterday to finish the Sprint? What will you do today? Are there any obstacles?
- **Review and Retrospective**
  - A meeting to demonstrate what was accomplished and determine what went well, what did not, how to improve.

(a) Adapted from Scrum – The Art of Doing Twice the Work in Half the Time by Jeff Sutherland

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Late February – The First Warnings of COVID-19 and its impact begin to be communicated by Atrium Health

Mid March – Request from Atrium Health to Shut Down All Elective Services

Non-Essential Surgeries, Procedures and Ambulatory Appointments to be Rescheduled

03.17.2020   ATRIUM HEALTH ALERT

CHARLOTTE, N.C., March 17, 2020 – Atrium Health, Novant Health and Wake Forest Baptist Health are coordinating together to prepare for and respond to the possibility of increasing cases of coronavirus disease 2019 (COVID-19) spreading in our communities.

Following the guidelines from the U.S. Surgeon General and the American College of Surgeons, Atrium Health, Wake Forest Baptist Health and Novant Health are rescheduling non-essential surgeries, procedures and ambulatory appointments, effective Wednesday, March 18. Any emergency and essential services will continue uninterrupted.
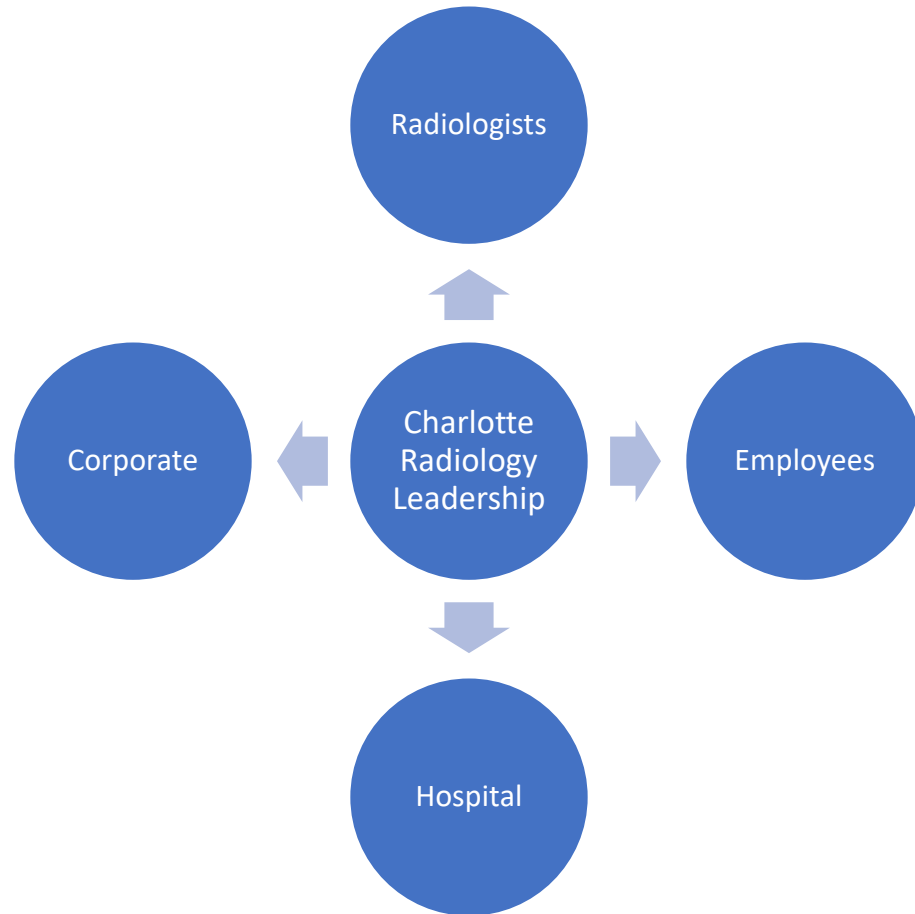
What Did That Mean for CR? Lots and Lots of *Communication and Action*

- Shutting down all 16 mammography screening sites overnight
- Shutting down two vein centers
- Contracting hours at our five JV outpatient imaging centers
- Making our remaining open centers COVID safe
- Designating one site as a "dirty" site for Oncology patients to be seen
- Prioritizing the order in which we shut down
- Communicating with patients – cancel, reschedule, still open, safety
- Communicating with furloughed staff who no longer had access to email
- Communicating with active staff to ensure they felt supported and safe
- Communicating with Radiologists who don't check their email
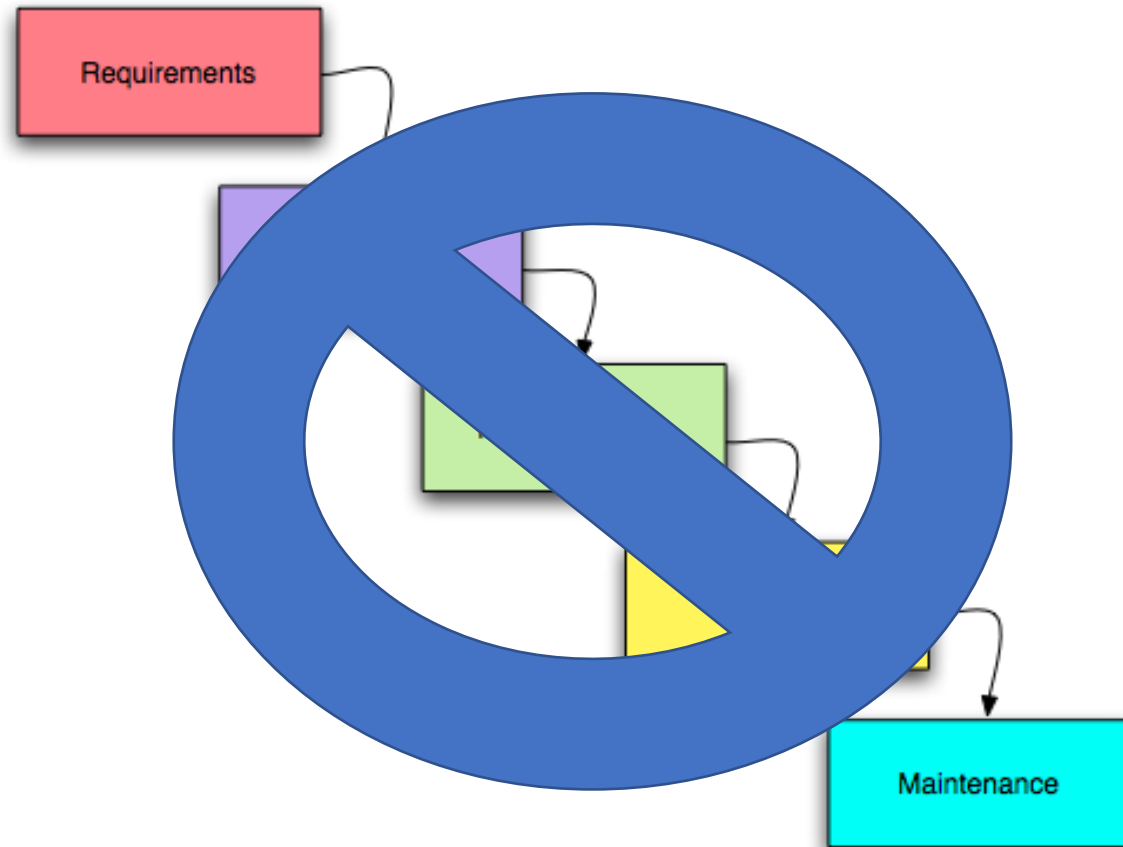- Communicating with the Hospital who had their own craziness going on

List of Things To Do Was Endless and Constantly Changing…By the Second

Policies

Exposures

Furloughs

Total Chaos
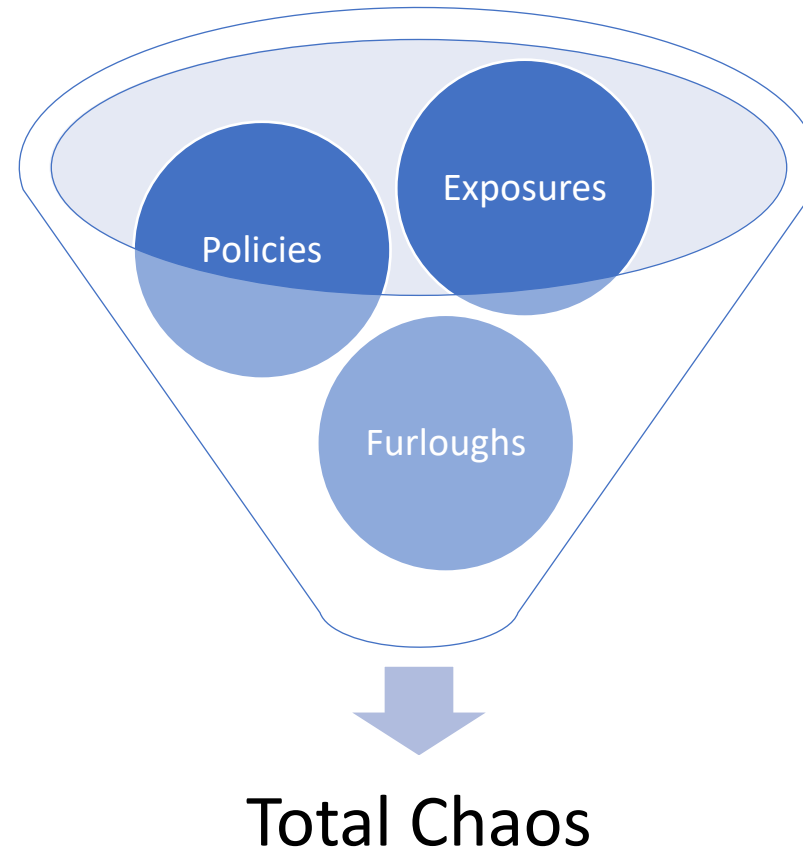
Multiple Stakeholders with Multiple Opinions, Priorities, Needs and Expectations

Radiologists

Corporate

Charlotte Radiology Leadership

Employees

Hospital

We Tackled This As We Would Any Other Project –
In a Coordinated, Planned, Measured "Waterfall" Way

https://managedagile.com/how-are-agile-and-the-coronavirus-related/

So We Got Started with Scrum – wait, what??

- What Is Scrum?

- How do I fit In?

- What Is My Role?

- What Are Scrum Events?

- Is it SCRUM or Scrum?

- There's a Crisis and We Are Writing on Sticky Notes???!!!

We Started Simple – Each Week Was a Sprint with a Daily Scrum Meeting and a Kan Ban Board
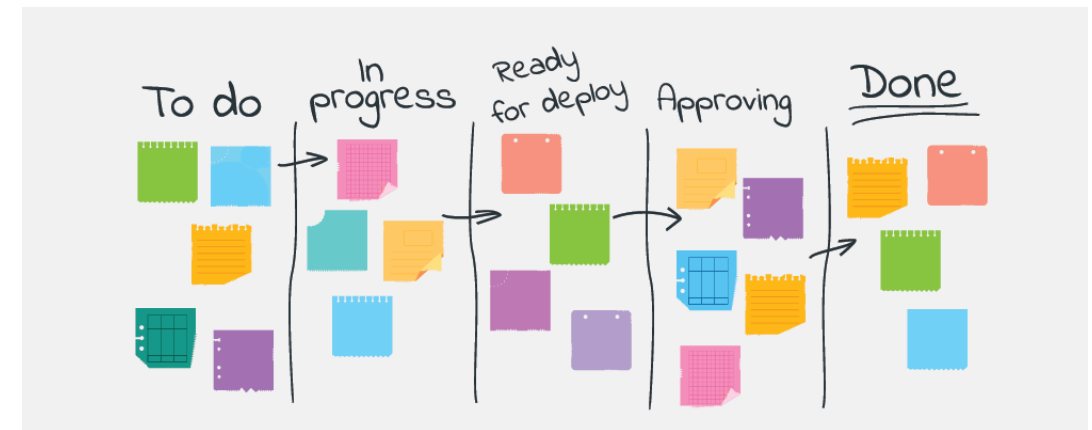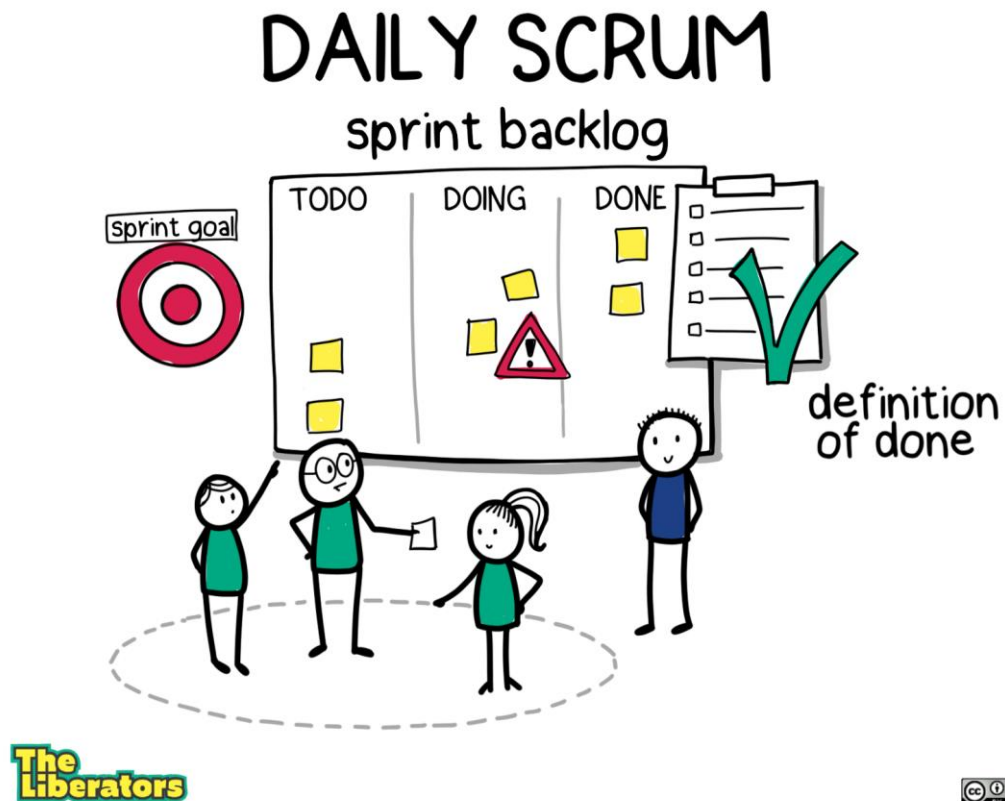
CR Roles and Responsibilities

- **Project Owner**
  - Practice CEO

- **Scrum Master**
  - Director of Continuous Improvement

- **Team**
  - VPs of Marketing, Operations, Finance, Physician Ops, Compliance, Directors and Above

- **Backlog**
  - Built the list as we learned more every day

- **Sprint**
  - One week

- **Scrum Board**
  - Organized by responsible person

- **Daily Huddle/Scrum**
  - Once per day to start
  - 9am daily – one hour after the first week

- **Review and Retrospective**
  - Unfortunately, we did not do this – we did not make the time until the immediate crisis had passed

We Started Like This...And Ended Like This...

Our Scrum Board – March 23rd 2020

BACKLOG

- TO DO (On Deck)
- IN PROCESS
- DONE
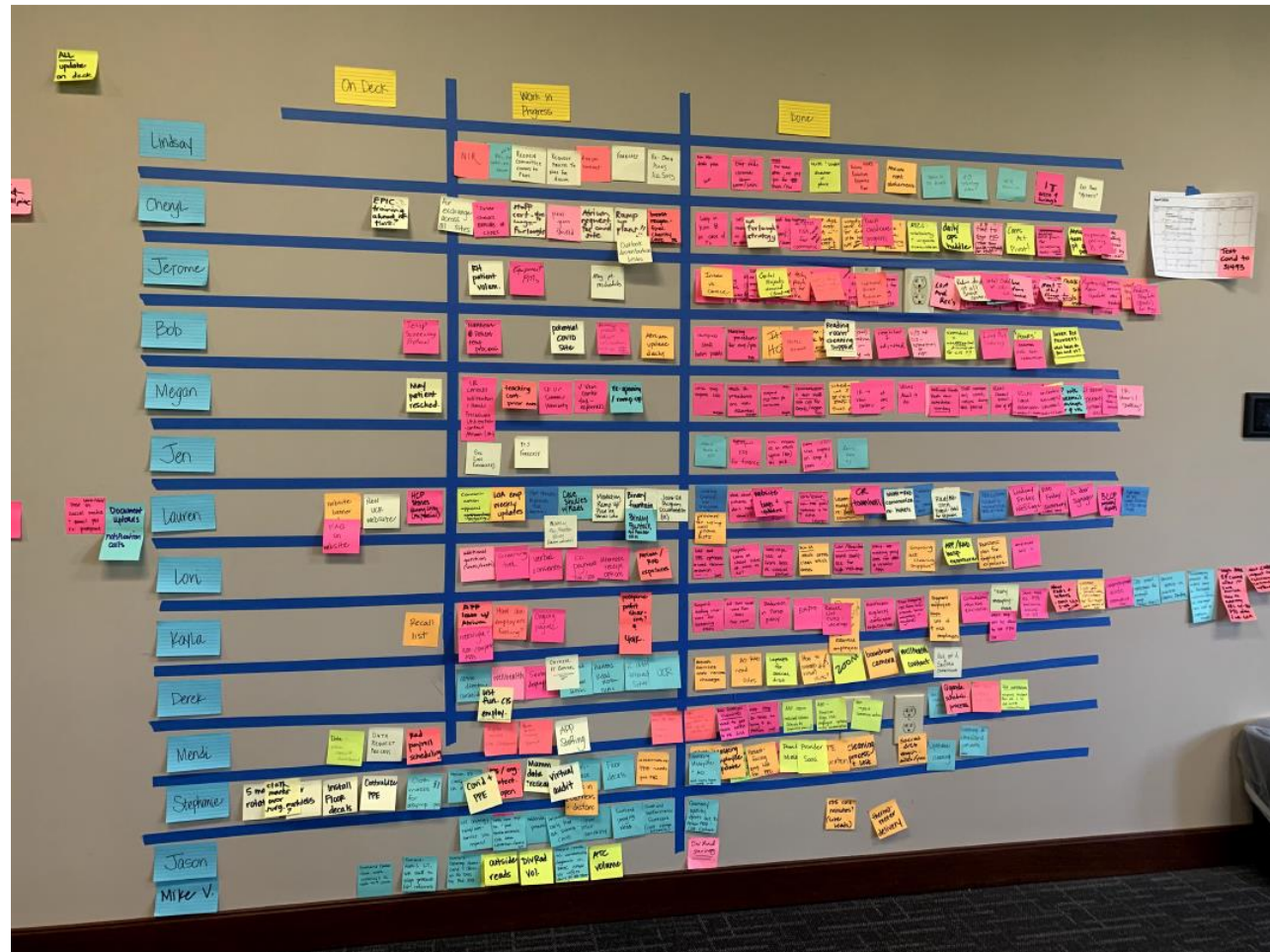
TEAM MEMBER

Responsible Lead

Our Scrum Board – April 22nd 2020

What We Accomplished – March to June 2020

- Closed all mammography screening centers and reopened to record volumes

- Enhanced our alignment with our hospital partners by being responsive to their needs

- Kept the trust of our patients by prioritizing their health and safety in line with national organizations such as SBI (Society of Breast Imaging) and ACR

- Retained 90% of our staff despite having furloughed employees by regularly communicating and ensuring they were taken care of (mentally and physically)

- Retained the business of our referring providers by communicating in real time about our closure and reopening to ensure them we were taking all necessary precautions for the safety of their patients but providing needed access

- Solidified approach to PPE predictive modeling for demand, distribution logistics and restocking approach

- Created alternate methods to disseminate information quickly and regularly (i.e. the policy changes that kept up with CDC policy changes)

- ***"SCRUM methodology fostered a level of confidence from the Radiologists (MD leaders along with frontline Rads) in the administrative leadership. Decisions and strategy were based on a solid approach that was responsive and tactical in a very fluid and uncertain time period."***

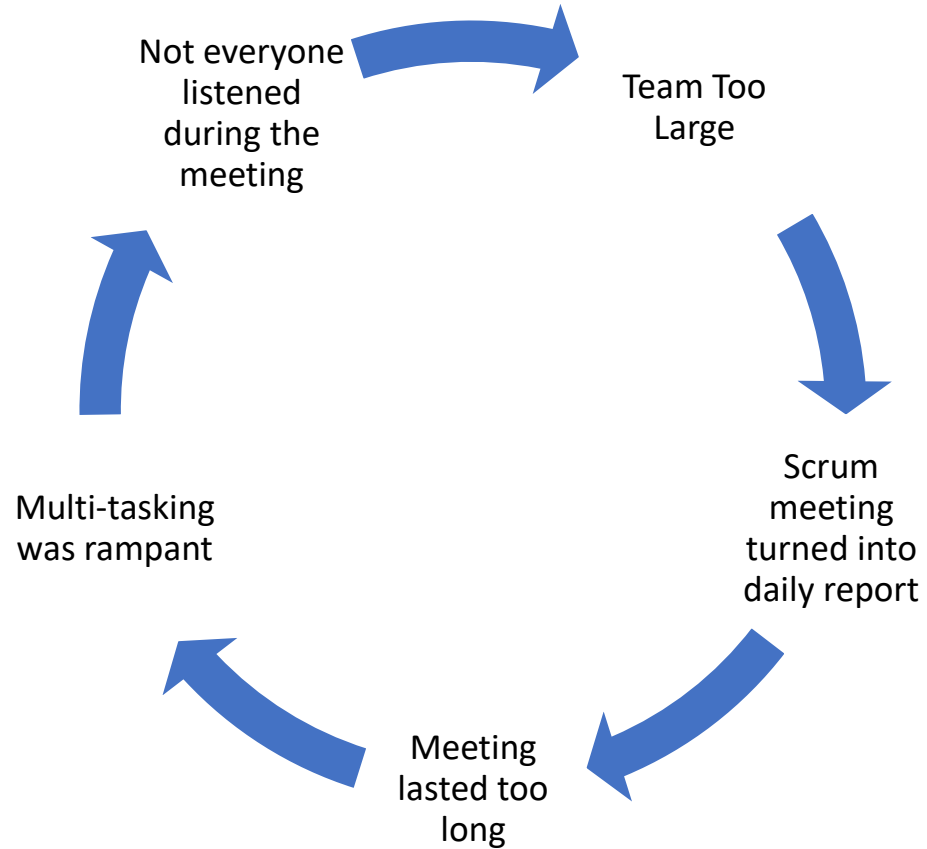# Our Patients Wanted Their Care...Safely but Quickly
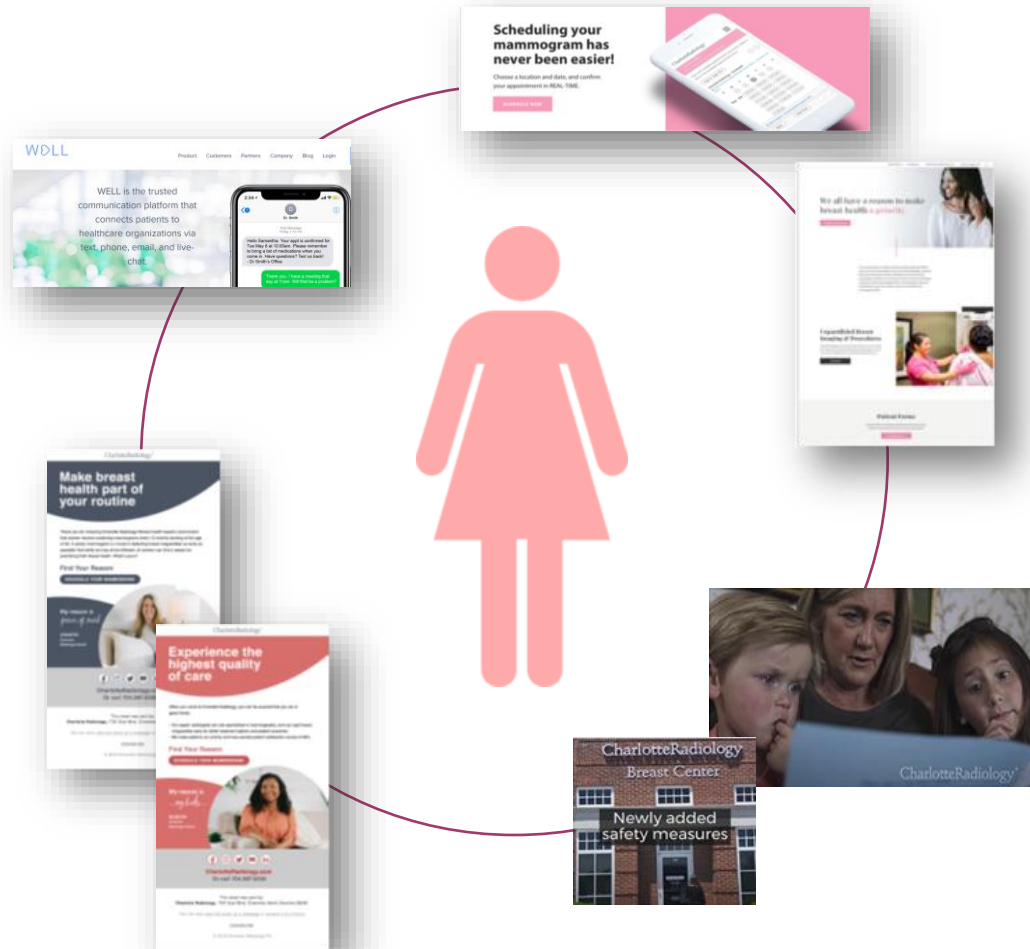
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A List of Common Mistakes in Agile/Scrum (a)

- The Scrum Master's role is to coach and facilitate, not manage.

- The daily Scrum is for the purposes of progress review and next steps planning toward the Sprint Goal ONLY

- The Scrum team becomes too large and disorganized – a smaller dedicated working unit is ideal.

- Documentation is critical – even in Scrum. Stick to the things that are most valuable.

- Getting the backlog right is critical - the people closest to the "customers" should be heavily involved in prioritization

(a) https://www.knowledgehut.com/blog/agile/five-common-mistakes-in-agile

After Action Review – Charlotte Radiology

Not everyone listened during the meeting

Team Too Large

Scrum meeting turned into daily report

Meeting lasted too long

Multi-tasking was rampant

We Lost Some of the Psychological Safety We Had Built

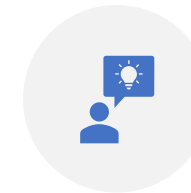PRACTICE EQUALITY IN CONVERSATIONAL TURN-TAKING

HAVE HIGH LEVELS OF AVERAGE SOCIAL SENSITIVITY AND EMPATHY

RECOGNIZE SHARED HUMANITY AND SHOW UNCONDITIONAL PROFESSIONAL RESPECT

ASSUME POSITIVE INTENT BY REPLACING BLAME WITH CURIOSITY

ADOPT A GROWTH MINDSET AND GIVE OTHERS SPACE TO MAKE MISTAKES

Next Steps for Charlotte

- Utilizing Scrum to manage to our 2021 goals/strategy including:
    - Monthly sprints
    - Daily Huddles
    - Formalize Scrum roles
    - Monthly Retrospectives

- Implementing and sustaining formal expectations around psychological safety as the foundation of our culture

- Ensuring we codify and utilize what we have learned to prepare for the next "crisis"

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Key Takeaways for Radiology Community

- An agile approach to project management can be incredibly helpful – especially during crises in which things are unpredictable, uncertain, and constantly changing

- As you build your business/administrative team, hiring for an expanding skillset that includes agile project management will allow you to balance competing priorities, continue to add value to partnerships such as hospital relationships, and ensure your practice evolves with the ever-changing healthcare environment

- Avoid the common pitfalls of Scrum in order to ensure it is impactful and effective as a project management methodology