The Use of the "Kanban Board" to Improve Workflow in the Radiology Department

Brandon Ballane¹, Ekramul Gofur MD², Sheldon Lerman MD², Kevin Thompson MD², Jared Meshekow MD MPH³, Perry Gerard MD MBA FACR¹,²

¹New York Medical College, Valhalla, NY
²Westchester Medical Center, Valhalla, NY,
³Temple University Hospital/Lewis Katz School of Medicine, Philadelphia, PA
Disclosures

The authors have no financial interests to disclose.
What is a Kanban Board?

- Kanban boards provide a foundation for different tasks to be placed.
- Divides different components of a project into tasks, ultimately improving workflow.
- Improves efficiency and effectiveness amongst team members.
- Can be digitally displayed online for remote use by all team members.

Elements of a Kanban Board

- **Visual Signals**
  - Visual cards such as sticky notes, magnets, tickets are placed on the board
  - Visual cards are created by members of the Kanban team
  - Each individual visual signs contains written notes regarding projects, tasks, and work items to be completed that day
Elements of a Kanban Board

- **Columns**
  - Each column contains multiple visual signs which represent a specific activity that needs to be completed
  - All of the cards in a column contribute to the workflow needed to complete a task
  - Each column can be labeled depending on the progress of a task such as:
    - “To Do”
    - “In Progress”
    - “Complete”
Elements of a Kanban Board

- **Work In Progress Limits**
  - Work In Progress Limits define the maximum amount of tasks that can be in a column at one time
  - Once a set Work In Progress Limit is reached in a column, all members of the team must focus on completing these tasks before more tasks are placed in the column
  - Work In Progress Limits allow for smooth workflow while preventing committing too many tasks at once
Elements of a Kanban Board

- **Commitment Point**
  - The initiation of work on a project
  - The point when a project is added to the board
  - Team members commit to starting the workflow and completing the project
Elements of a Kanban Board

- **Delivery Point**
  - Delivery point occurs when the project is complete
  - The time between the commitment point and delivery point is the “Lead Time”
  - A shorter lead time can be an indicator of improved efficiency in the production process

Retrieved From: https://www.atlassian.com/agile/kanban/boards#:~:text=A%20kanban%20board%20is,order%20in%20their%20daily%20work.
The Role of Kanban Board in Radiology

- Kanban Boards can be used in a wide variety of fields
- In the field of radiology, Kanban boards can improve the efficiency of radiology departments on the completion of projects
- Kanban Boards can especially be helpful for research at Radiology departments
  - Research at academic centers involve Attending Physicians, Residents, and Medical Students
  - A digital Kanban board can be beneficial in integrating all members of the team for the efficient completion of radiology research projects at academic institutions
Conclusion

- Kanban boards provide an effective framework for the integration of all members of a team in the workplace
- An organized board allows all members of a team to understand their role in the workflow and completion of a project
- Members of the team develop and autonomous role in the completion of a project
References

