

What is Acute Care Surgery at UH?

Provides care for:

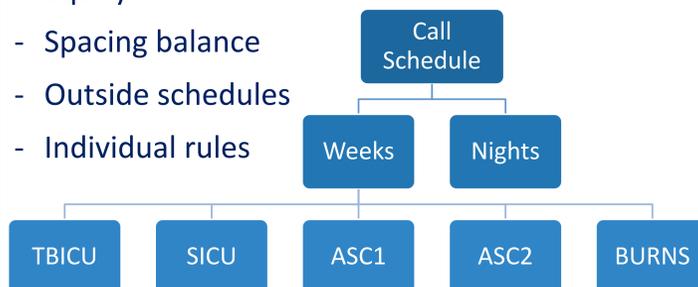
- critically ill and injured patients due to trauma and burn
- patients who need emergent medical attention

What is their scheduling challenge?

Objective: 5 units to be always covered by 15 attendings.

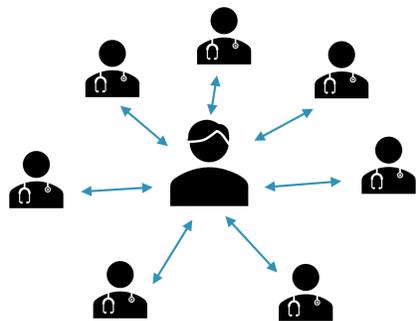
The schedule must consider:

- Off time requests
- Equity
- Spacing balance
- Outside schedules
- Individual rules



What is their current approach?

The Division Chief creates the schedule by hand.



HIGH TIME AND EFFORT

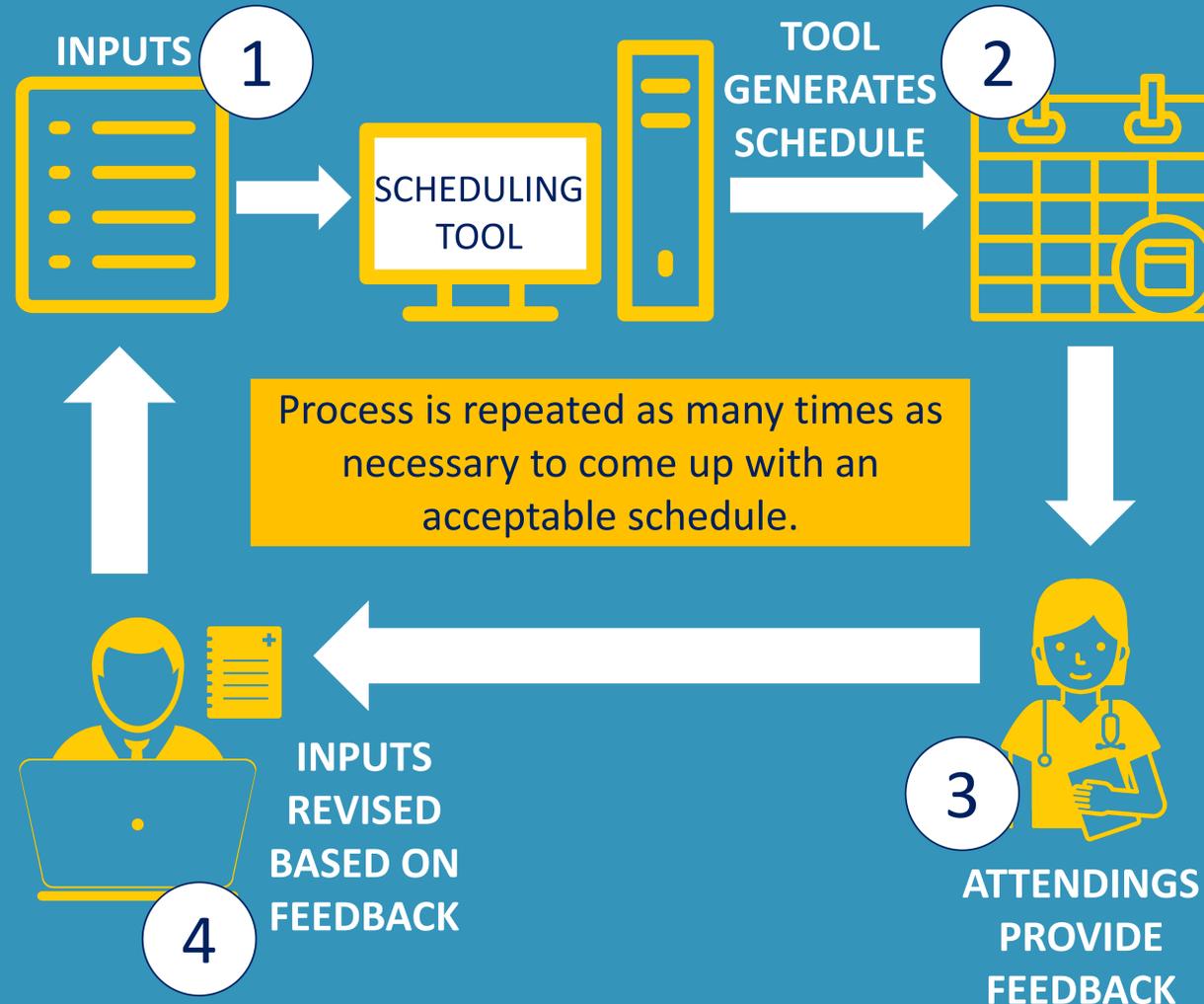
How can we help?

Our CHEPS team is working to create a tool that can automate and optimize the scheduling process! We are...

- Building a digital tool to generate high quality schedules within seconds
- Using a mathematical model to enforce scheduling rules and identify the best possible schedule based on chosen criteria
- Reducing the time and work involved with revising the schedule

Automating Trauma Call Scheduling for Short and Long-Term Gains

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How does the tool work?

1. Inputs – Gather inputs such as attending’s time off requests and target number of assignments in each unit
2. Tool generates schedule – Users just need to hit “run”!
3. Attendings provide feedback
4. Inputs revised based on feedback

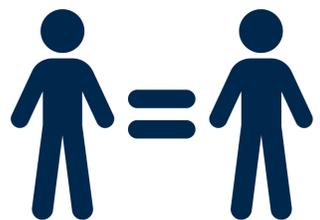
What are the short-term goals?

- Building many schedules in a short amount of time
- Obtaining rapid feedback and getting a better understanding of trade-offs within schedules.
- Increasing usability of the tool
- Reducing amount of manual work time
- Increasing clarity on schedule preferences



What are the long-term goals?

- Removing the perception of bias in scheduling, ensuring equity
- Equity spanning years with holiday assignments



Acknowledgements

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