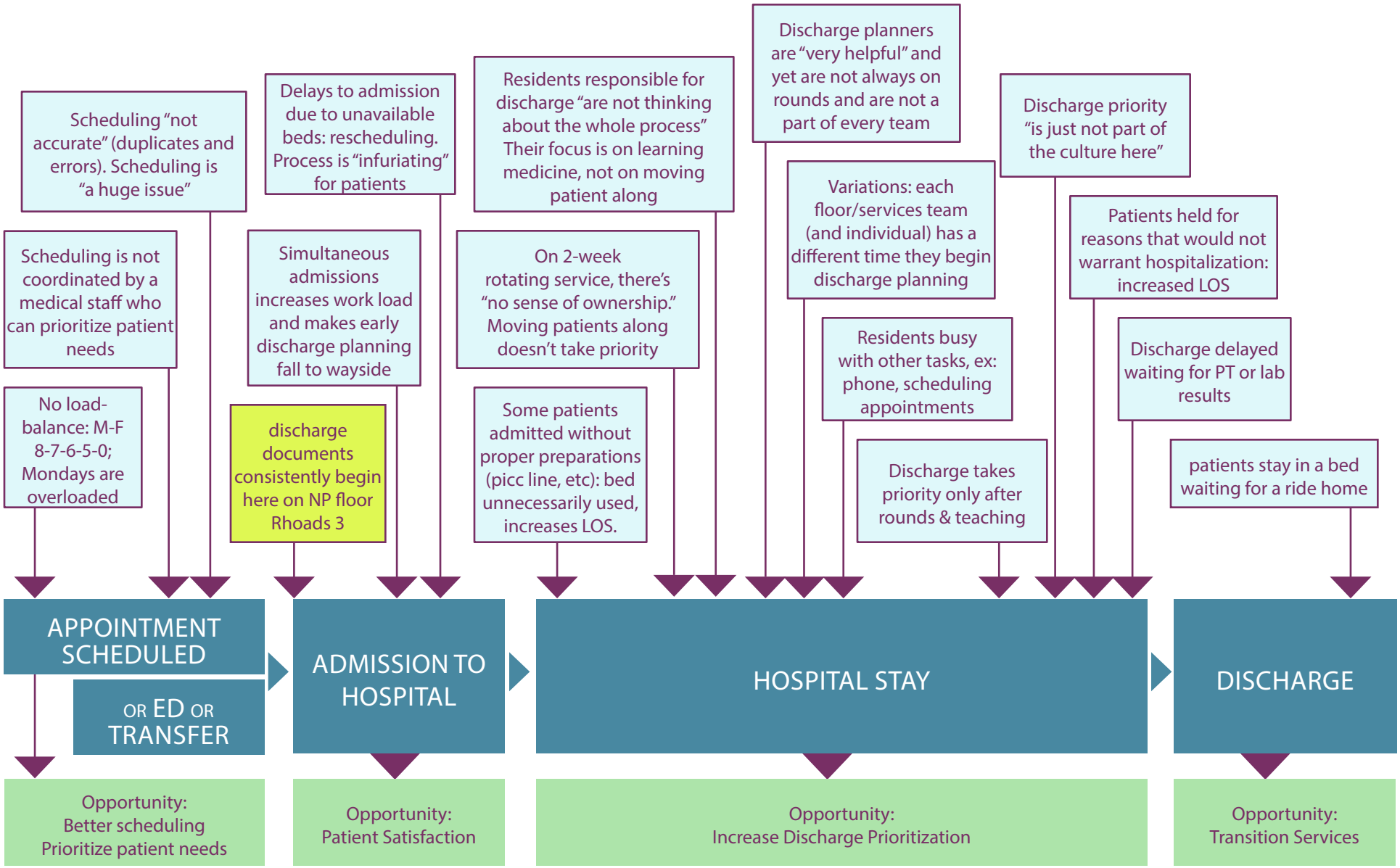
PROCESS

DISCHARGE DESIGN SPRINT 9/13

Possible target opportunities within discharge/patient journey. "Bed-flow is the real problem"



Information gathered from six staff interviews:
Rebecca Hirsh, MD Director, Inpatient Oncology Services
Colleen R. Kucharczuk, CRNP, Lead Oncology Nurse Practitioner
Sarah Longworth, MD Chief Medicine Resident

Center for Health Care Innovation contact: Kate Clayton
Mauri Sullivan, MSN, RN Clinical Director, Medical Nursing
Beth Eaby-Sandy, MSN, CRNP, OCN
Chris Klock, Performance Improvement

“TIME TO CHEMO” LIQUID ELECTIVE PATIENTS

DISCHARGE DESIGN SPRINT 9/13

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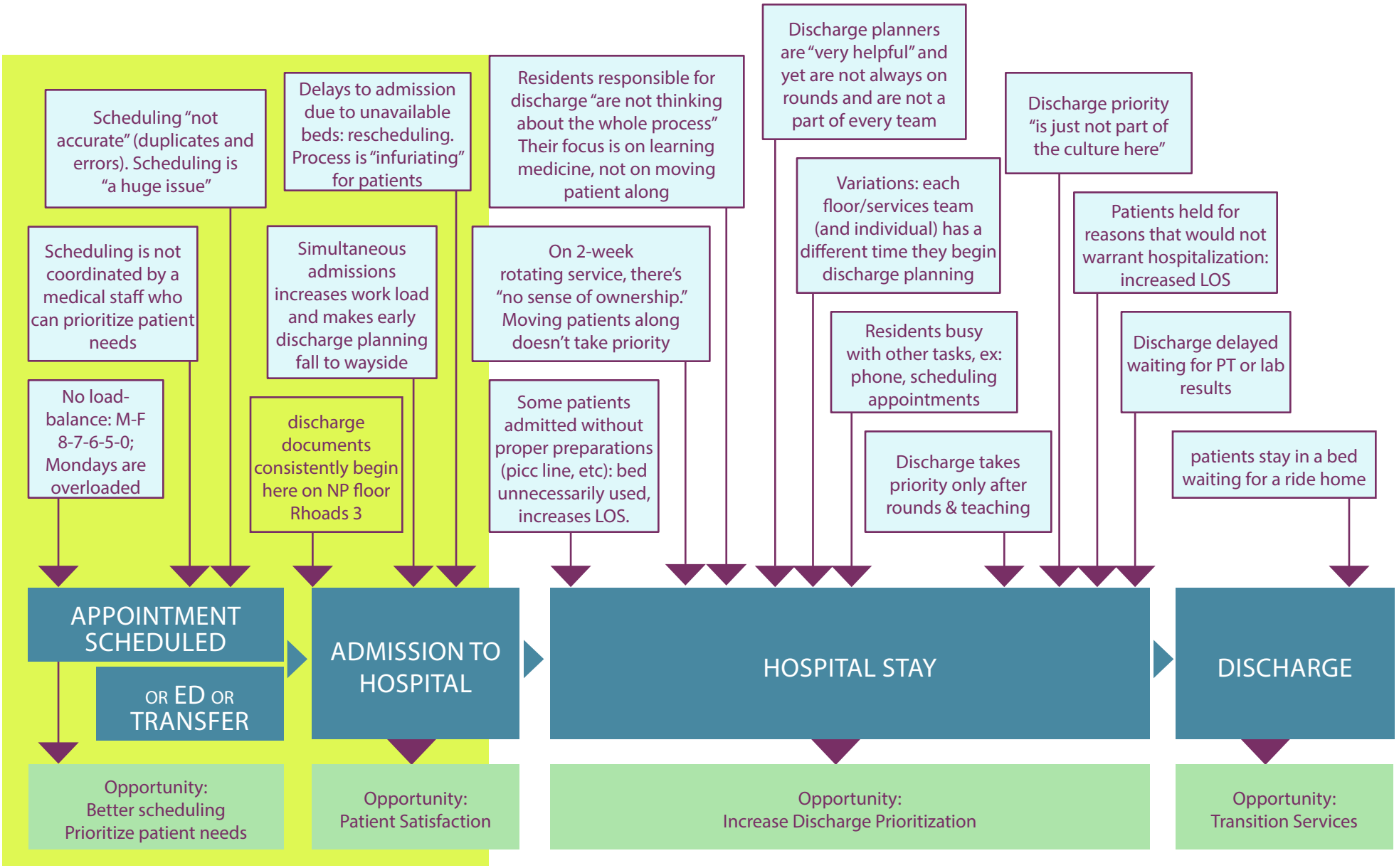

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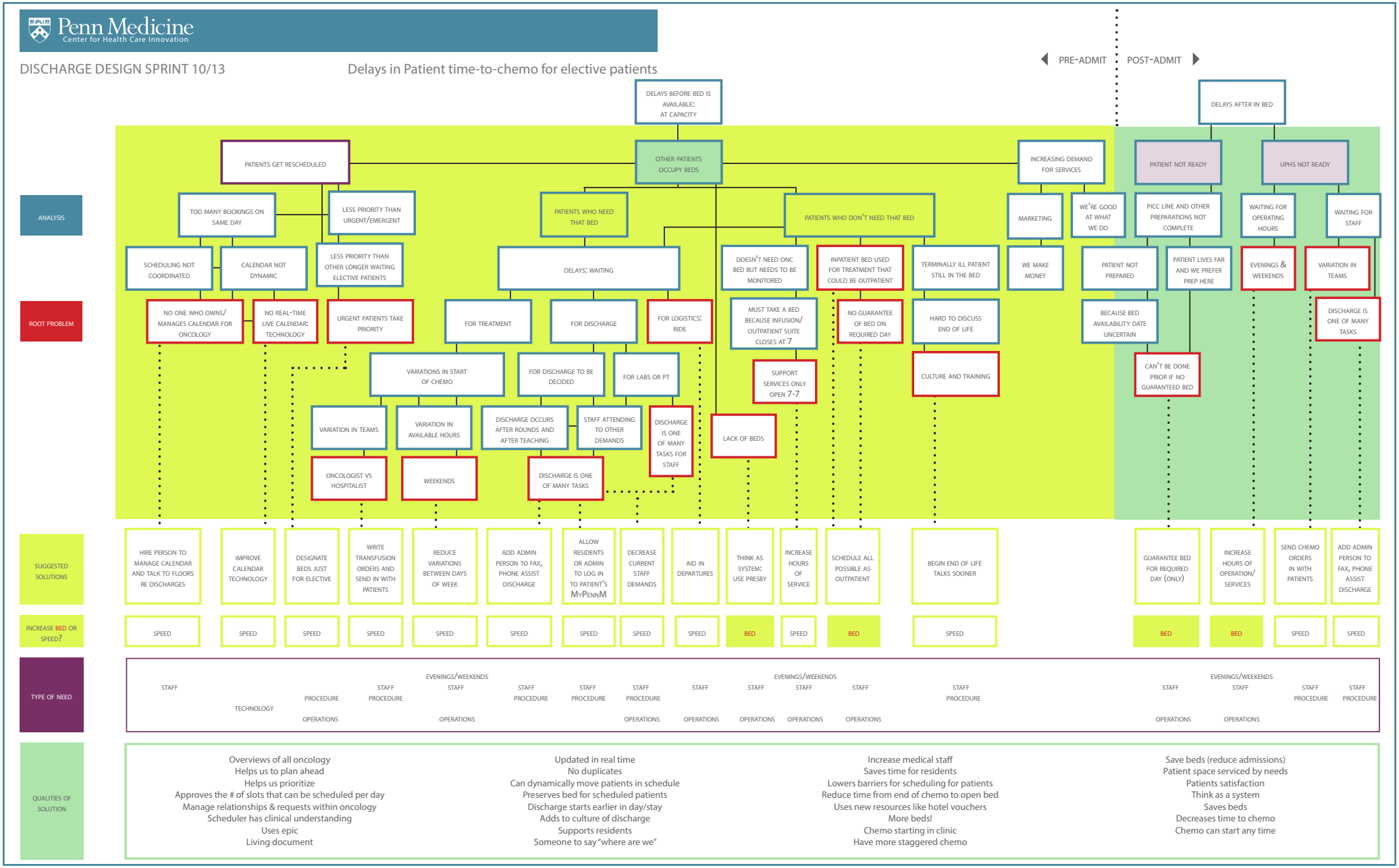
PROCESS

Contextual Inquiry: clinicians and staff, liquid & solid, outpatient/inpatient, TAC, etc.
RCA. Systems. Crowdsourced ideas. Solutions types & qualities.



CURRENT SYSTEM:

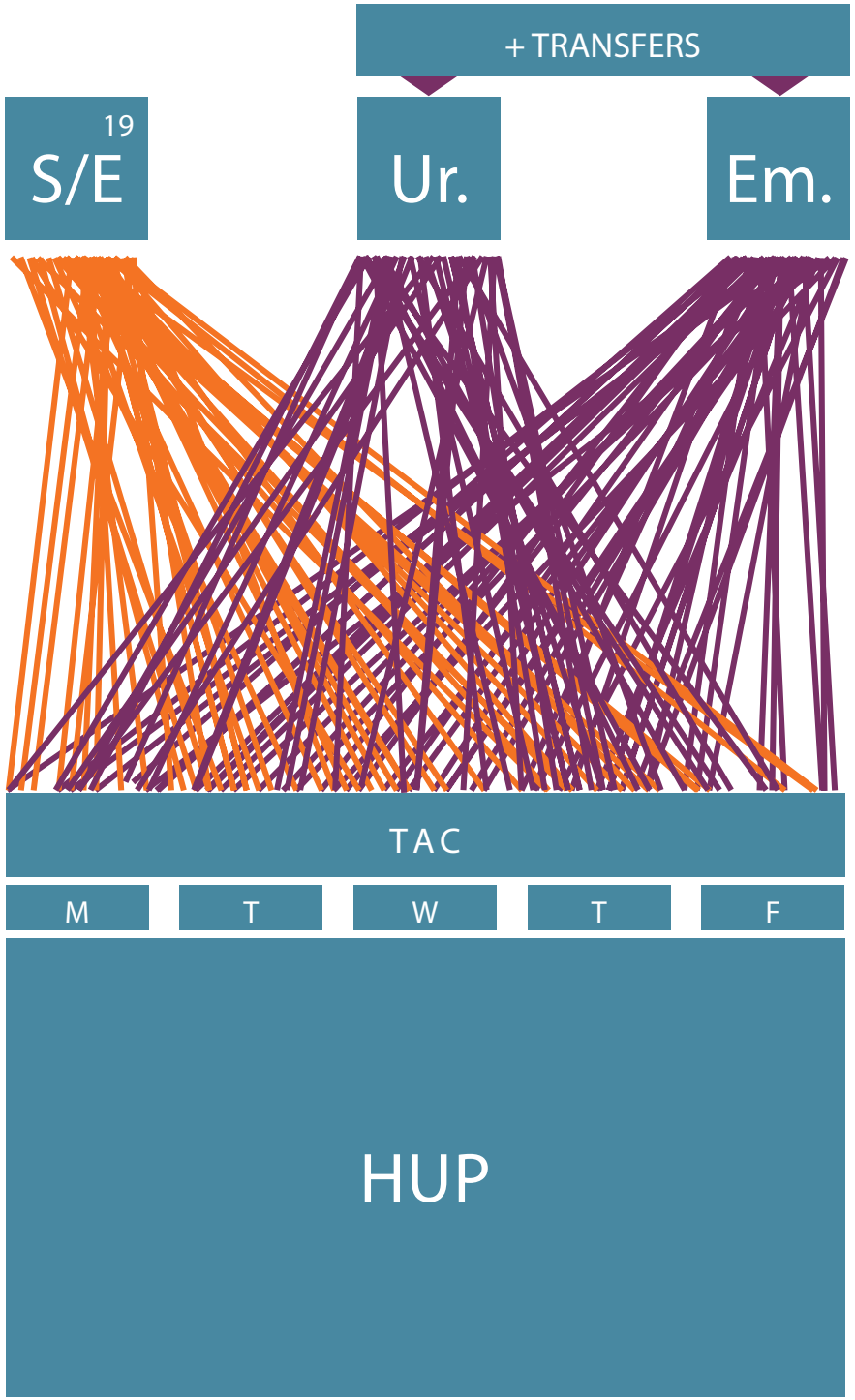
Scheduled/Elective, Urgent, & Emergent admissions, compounded by transfers, are all sent as Admissions requests to The Admissions Center

IN ESSENCE:

There is no oncology-wide system that schedules patients based on clinical needs, load balances demands, optimizes outpatient potential, prepares patients before admission, or manages bed-flow management. Result is constant rescheduling that potentially affects dose intensity and outcomes.

SOLUTIONS TO TEST:

2 solutions can consolidate the most needed qualities.



A: ONC ADMISSIONS STAFF

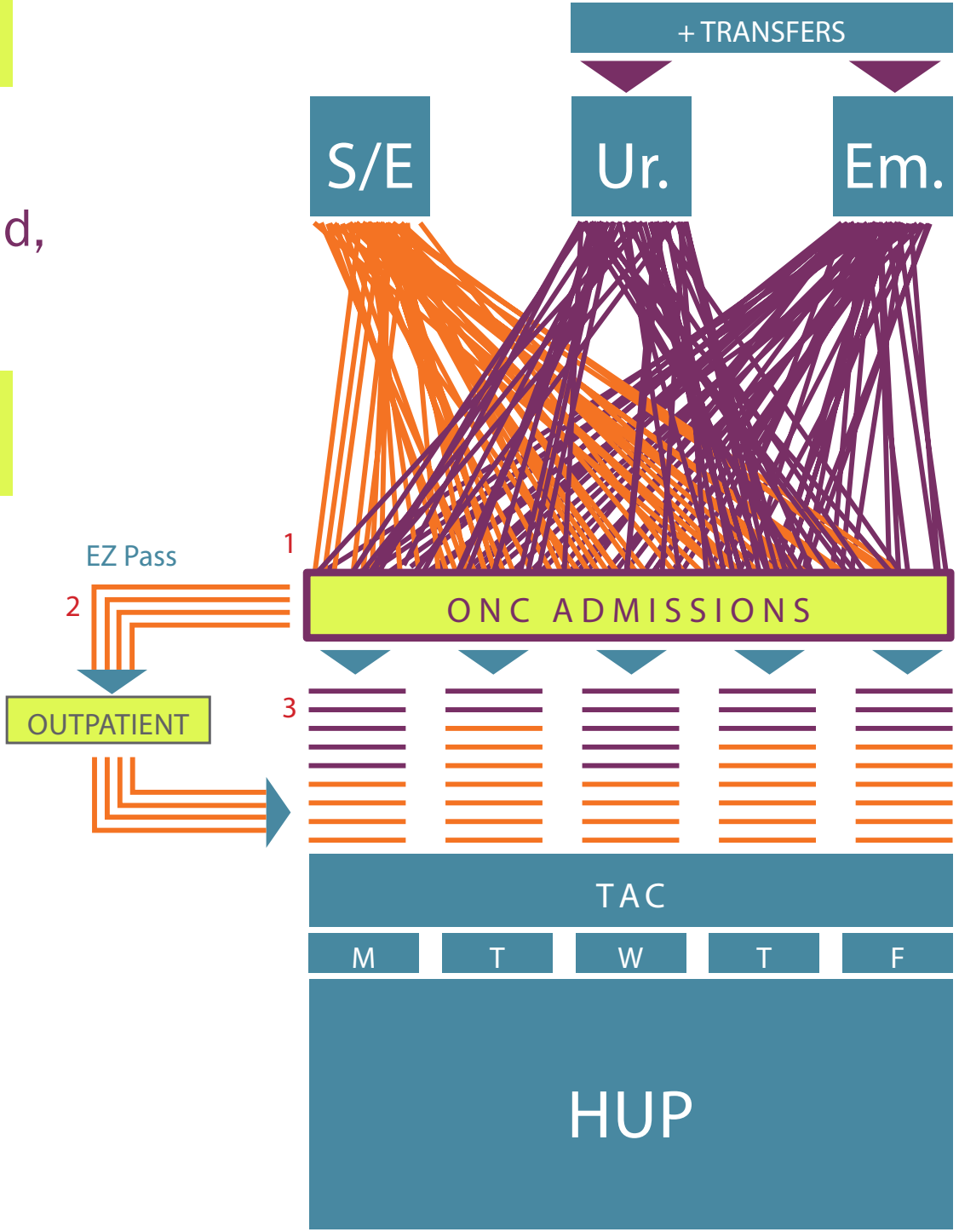
Manage bed-flow,
reduce scheduled bed demand,
prepare patients

3 MAIN GOALS:

1) a clinician to prioritize and load balance patients based on clinical needs

2) to reduce length of stay by scheduling all possible outpatient treatments as such (mixed regimen)

3) to coordinate patients before hospital admission with all necessary preparations to reduce time-to-chemo



ALTERNATIVE VIEW: A

Manage bed-flow,
Reduce scheduled admissions,
Prepare patients

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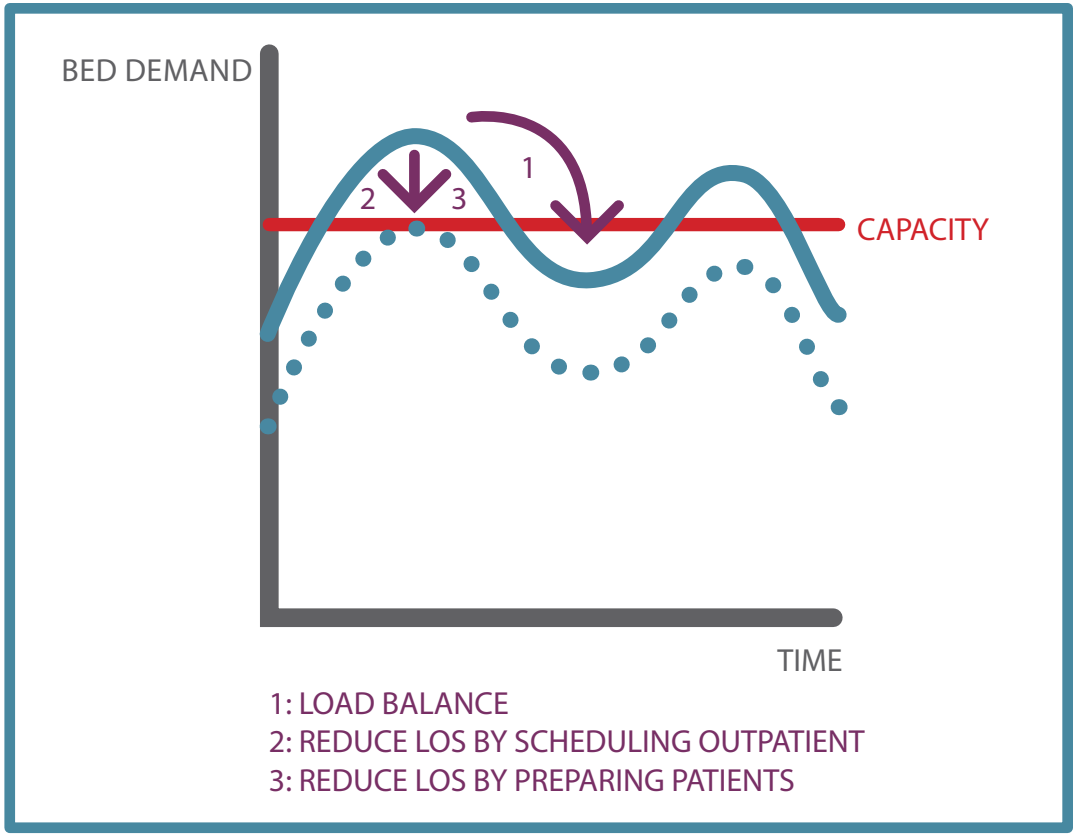
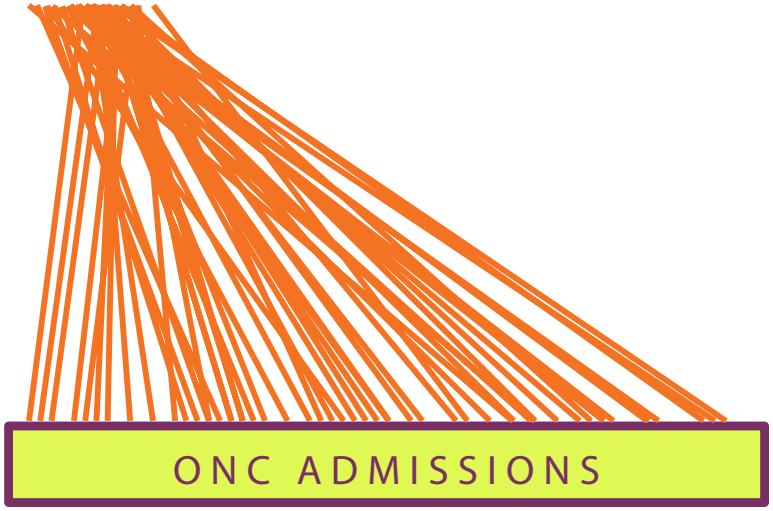


A: HOW MIGHT WE TEST?

Minimum Viable Product



EXPERIMENT

In parallel to current system, schedule with prototypes to test these metrics:

What are the Metrics?

1.“Minimize the time from scheduling to chemo”
2. Reduction of rescheduled admissions (delays),
3. Reduction of LOS for scheduled admissions

What tools does this person need?

1: A unified system of prioritization, *co-created* from clinicians who schedule patients
2: An organizational calendar method to balance demand.

EXPERIMENT:

Scheduling by range:

For example: Patient Smith is scheduled for Regimen X, with a 4 day window for acceptable admission, beginning November 10th:

Nov 10:

Patient J. Smith
Regimen X
Earliest Date: Nov. 10
Latest Date: Nov. 14
Time window: T-4

EXPERIMENT:

Scheduling by range:

For example: Patient Smith is scheduled for Regimen X, with a 4 day window for acceptable admission, beginning November 10th:

Each day after the start date, Time - # ticks up one day:

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The aim is to schedule patients with the highest T-# possible (T-4)

EXPERIMENT:

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The aim is to schedule patients with the highest T-# possible (T-4)

Urgent and Emergent patients always present at T-0

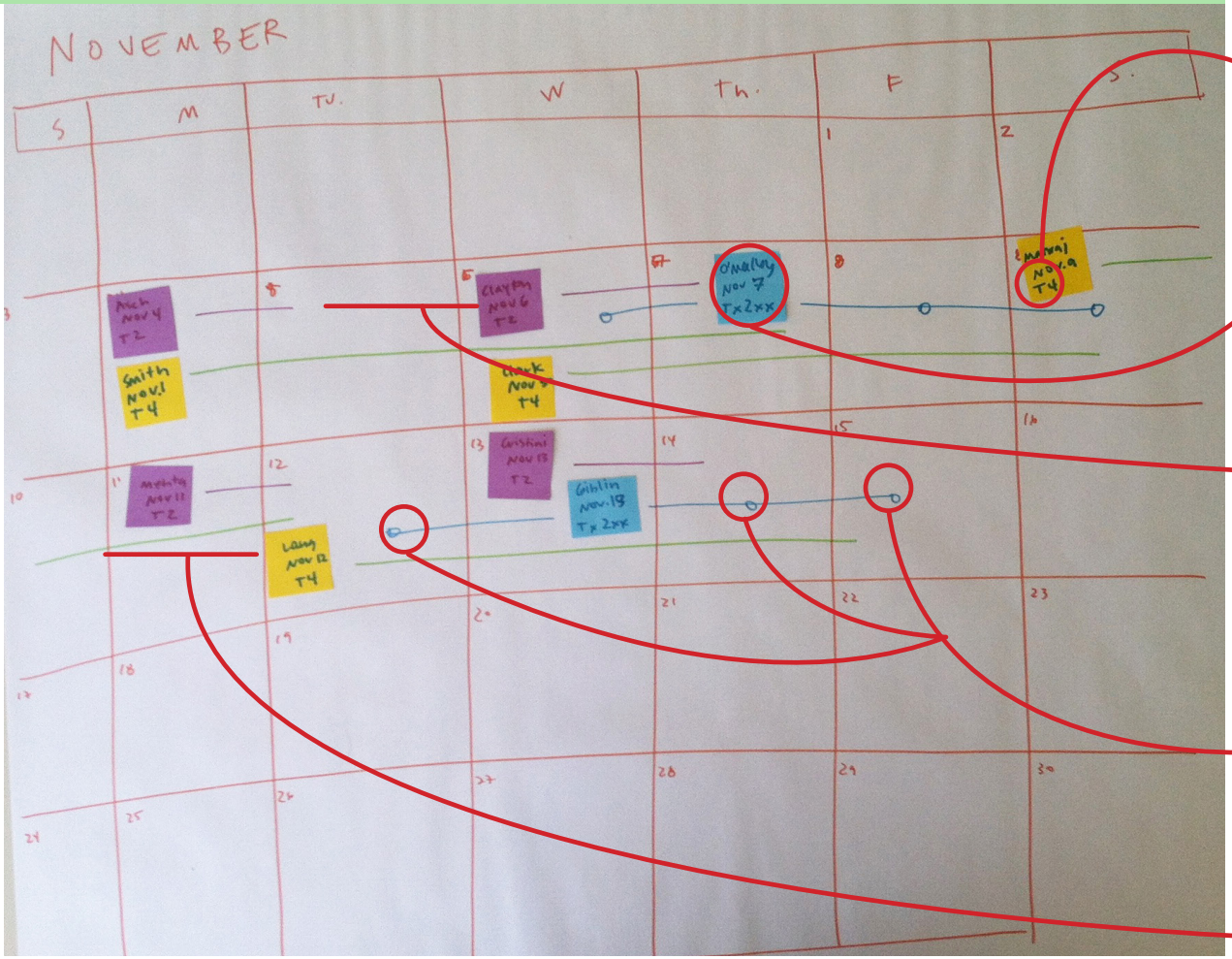
Patient Emergent
Indication
Earliest Date: today
Latest Date: today
Time window: T-0

Mixed inpatient/outpatient Regimens are T-0 on required hospital days

Patient
Regimen X MIXED
Earliest Date: today
Latest Date: today
Time window: T-0

EXPERIMENT:

A calendar prototype: the best prototypes aren't fancy!



Questions in prototyping:

What algorithm can we use to determine treatment window?

What's the best day to schedule mixed regimens?

What is the process for making sure scheduled patients have all preparations ready?

How many beds did we save?

Who does Onc Admissions talk to on the floors?

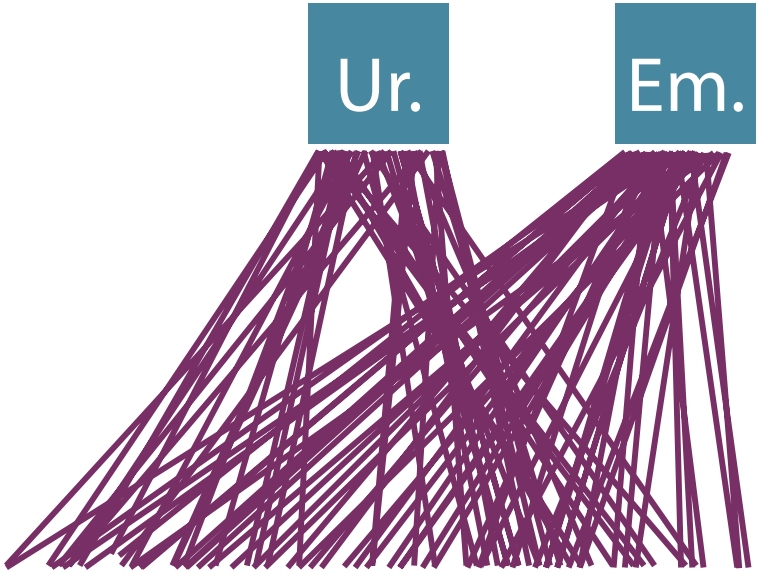
Aha! MVP testing leads to discovery: other tools that can be implemented, and methods on how Onc Admissions can best work with other HUP/PCAM teams.

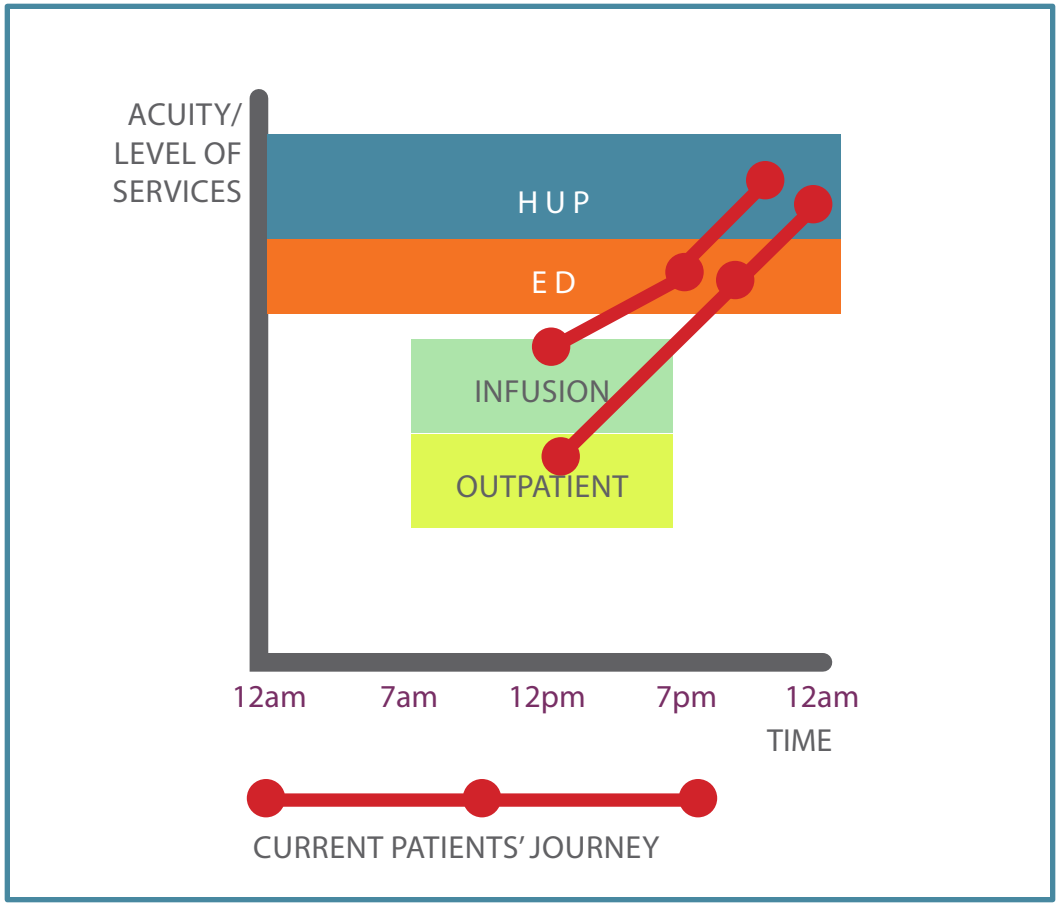
B: URGENT CLINIC

To assess, identify, and offer intermediate levels of outpatient care,
To reduce urgent and emergent admissions,
To increase outpatient services

WHAT HAPPENS NOW:

Uncomplicated patients at Infusion and Outpatient appointments increase urgent and emergent bed requests.





B: URGENT CLINIC

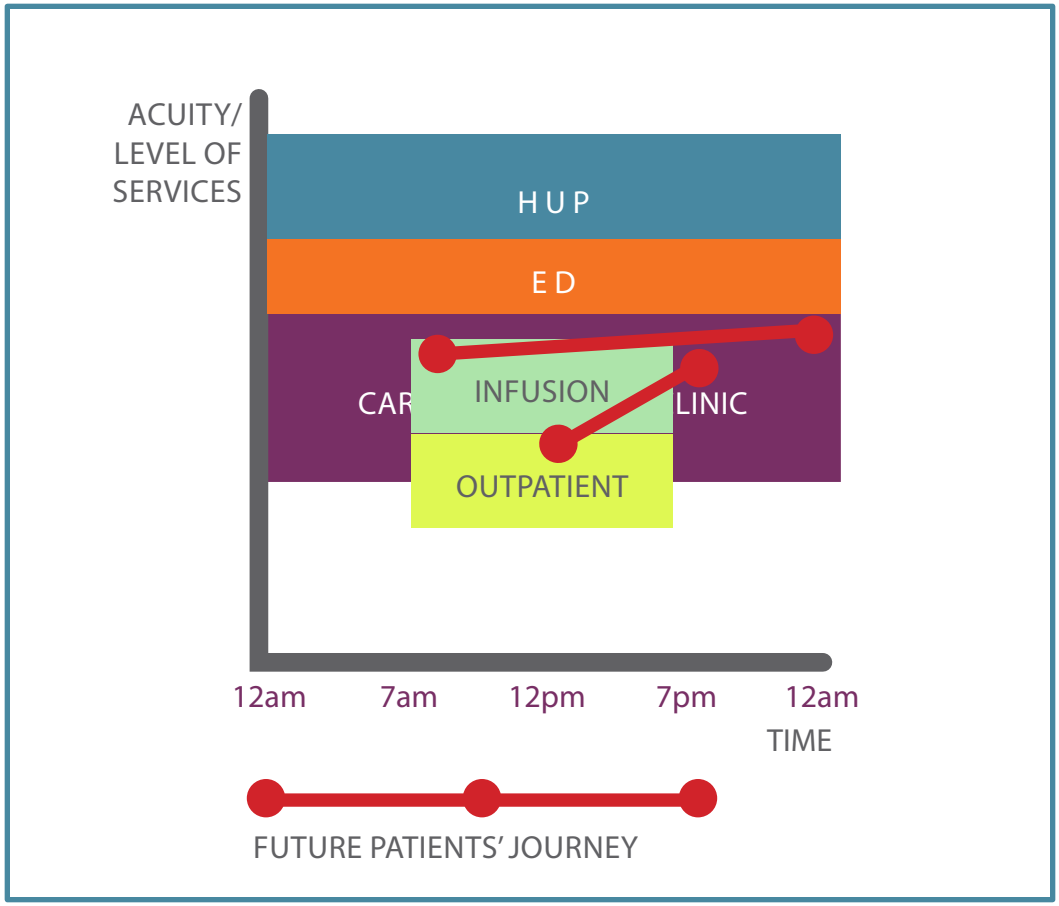
To assess, identify, and offer intermediate levels of outpatient care,
To reduce urgent and emergent admissions,
To increase outpatient services.

3 MAIN GOALS:

1) To triage patients to their appropriate level of care

2) To offer this intermediate care: fluids, blood products, vitals, labs, IV medications, etc.

3) Reduce HUP admissions by providing outpatient services, and bypassing the ER for HUP-required admissions.



EXPERIMENT:

PROTOTYPE: A form for providers who would use an urgent clinic

Imagine we have a 24 hour urgent clinic that can provide outpatient services to patients to avoid admissions to the ED and HUP. This clinic can evaluate a patient, provide fluids, blood products, labs, IV medications, check a CBC, give transfusions, give a neupogen shot, and check vitals.

If we had this clinic, I _____
provider name

could have sent _____
patient name

to the urgent clinic for _____
indication

_____
time of day date

The patient would likely use the clinic for _____
hours

☐ This would save a hospital admission altogether

☐ This would avoid a patient being sent to the ED only

Note:
_____
_____
_____
_____
_____
_____

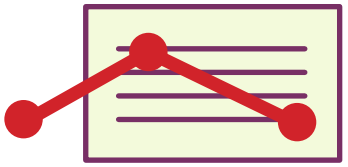
EXPERIMENT:

Experiments to test solutions to plan for greater success

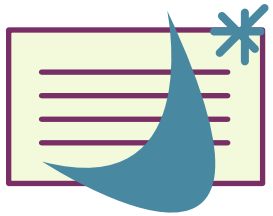
1. Vapor test—Offer something that hasn't materialized yet:

Give a form to clinicians who admit patients from Infusion or Outpatient services: For each patient, if we had a clinic, who would they send there?

Track patients from above list: could that patient have been satisfied by clinic services? Did they develop into greater acuity, or could they have have avoided ED and HUP?



2. One night stand—try it before you commit:



Based on demand from above, add services to the Infusion suite as a moonlit clinic, or reserve Observation Unit beds as urgent clinic for patients who present during outpatient visits and could avoid admission.

OTHER IDEAS

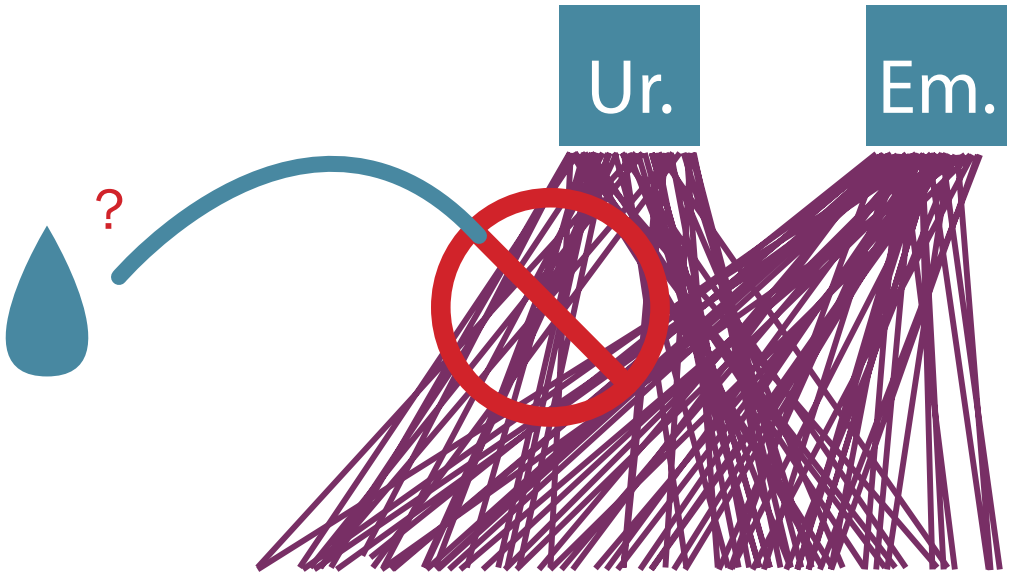
Looking at the root causes of urgent presenters to further identify reasons for bed demand.

WHAT IF WE KNEW...

If we knew something 2-3 days ahead of the time that urgent and emergent patients presented: would it be helpful? Could we intervene?

For example, could we provide hydration patches for remote monitoring?

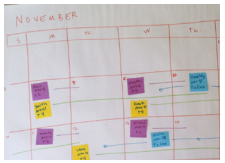
Are there other methods we can employ to reduce cases of nausea, fever, etc, before patients present?



RECAP

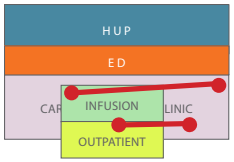
Rapid prototyping can help us to quickly discover specific criteria for creating robust solutions that address needs and qualities across oncology.

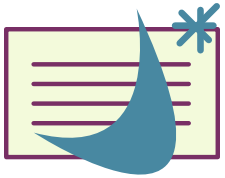
A: ONC ADMISSIONS



MVP parallel scheduling will help determine how onc admissions will best be executed. A schedule window range and calendar prototype will help determine how to load balance, prepare patients, and mix inpatient/outpatient regimens.

B: URGENT CARE





In addition to current pilot, “Vapor testing” with surveys and “one night stands” will help gauge group demand and potential.

C: FUTURE NEEDS

What can we forecast in the future of oncology? Let’s test new ideas to improve bed-flow and patient experiences/outcomes, and increase our service efficiency.
Ex: BMT as mixed inpatient-outpatient: testing these ideas to lead to earlier implementation.

CONCLUSION

Let’s move these ideas forward!

Oncology bed-flow can be improved by consolidating qualities into:
an oncology-specific scheduling/admission process, and
a higher utilization of outpatient services.

THANK YOU

Oncology & Admissions

Rebecca Hirsh, Mauri Sullivan, Regina Cunningham, Matt Goldstein, Colleen Kucharczuk, Beth Eaby-Sandy, Sarah Longworth, Sunita Nasta, Tonita Chapman, Michelle Cannon, Ella Ryan-Meloni

Leadership

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Innovation

Kate Clayton, David Asch, Roy Rosin, Shivan Mehta, Raina Merchant, Amanda Christini, Jen Myers, Adam Lang, Matthew Van Der Tuyn, Katy Mahraj, Emilie Bartolucci, Derek Mazique