



January 11, 2024

UW-TASP | Flex Program | HRSA

- Process Mapping

Process Mapping

What: Graphical representation of how things get done

Why: Visualize a process to guide decision-making



what's the
opposite of
navigate?

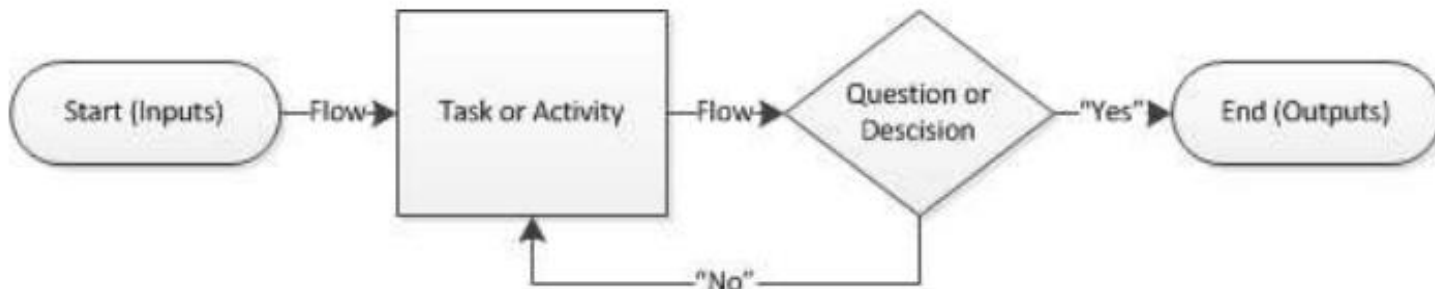


neglect, forget, get lost



Process Mapping: What is it?

- Visual organization of interrelated activities which form a patient care pathway or process
 - Describe the current state
 - Identify opportunities for improvement
 - Optimize efficiency by removing waste



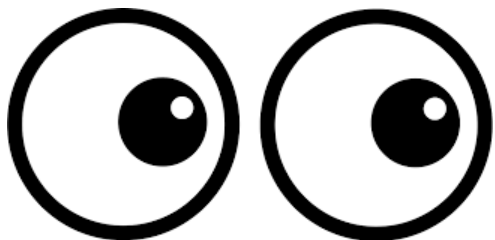
Selective attention

- How many times do the players in white pass the ball?
- [Link](#)

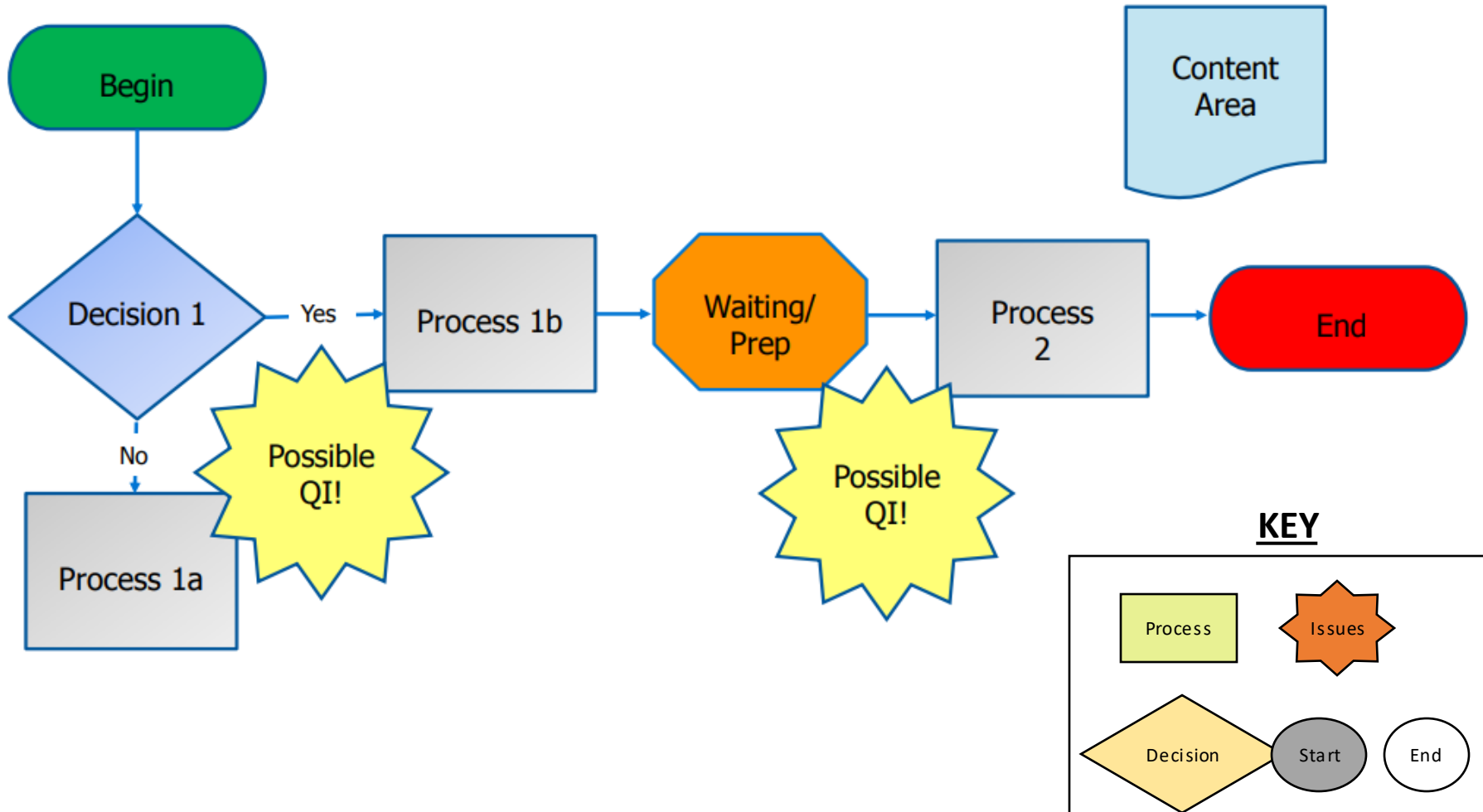


Process Mapping: Why do we need it?

- See with fresh eyes
 - Objectively describe a workflow
 - Make targeted changes
 - Institution/Process-specific



Process Mapping



Process Improvement = Survival

The New England Journal of Medicine

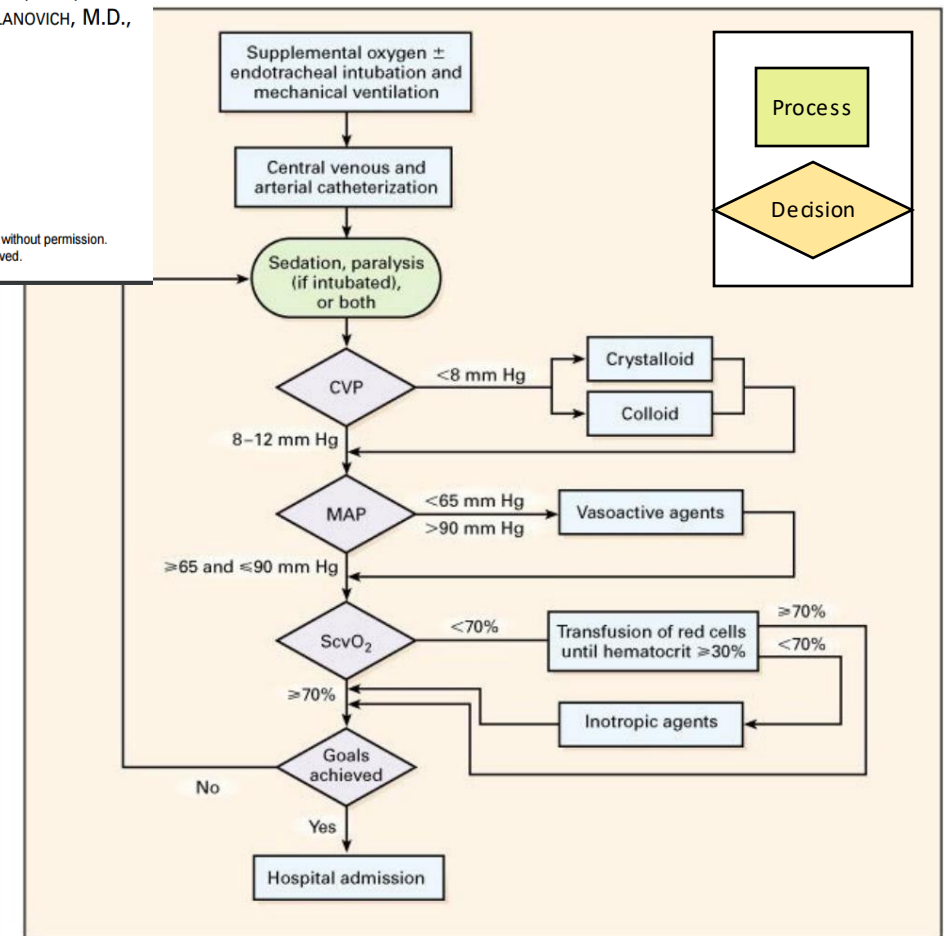
EARLY GOAL-DIRECTED THERAPY IN THE TREATMENT OF SEVERE SEPSIS AND SEPTIC SHOCK

EMANUEL RIVERS, M.D., M.P.H., BRYANT NGUYEN, M.D., SUZANNE HAVSTAD, M.A., JULIE RESSLER, B.S.,
ALEXANDRIA MUZZIN, B.S., BERNHARD KNOBLICH, M.D., EDWARD PETERSON, Ph.D., AND MICHAEL TOMLANOVICH, M.D.,
FOR THE EARLY GOAL-DIRECTED THERAPY COLLABORATIVE GROUP*

1368 • N Engl J Med, Vol. 345, No. 19 • November 8, 2001 • www.nejm.org

The New England Journal of Medicine
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In-hospital mortality was 30.5 percent in the group assigned to early goal-directed therapy, as compared with 46.5 percent in the group assigned to standard therapy ($P=0.009$).

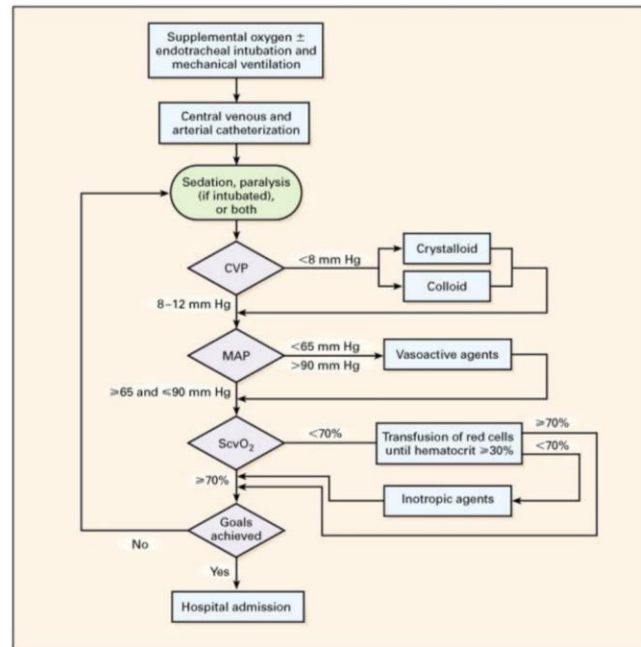


Process Improvement = Survival = Joint Commission Requirement

The New England Journal of Medicine

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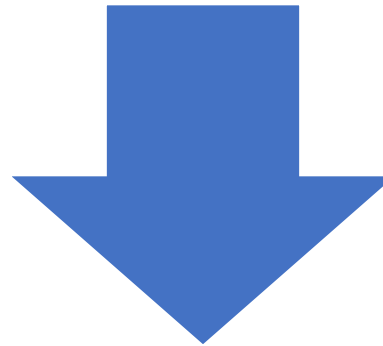
Process Mapping: Time Observation Sheets

Time Observation						
Process: Time to ABX						Page:
Step#	Work Element	1	2	3	Task Time	Remarks
1	Antibiotic prescribed by MD	1000	0807	1500	0	Pharmacy Tasks
		0	0	0	6.40"	
2	Order verified by Pharmacist	1005	0820	1502	20"	
		5	13	2		
3	Label prints	1006	0820	1502	5.40"	Nursing Tasks
		1	0	0		
4	Pharm Tech pulls product and labels	1008	0822	1515		
		2	2	13		
5	Pharm Tech makes product	1023	0830	1601	23	
		15	8	46		
6	Pharmacist checks medication	1030	0850	1616	14	
		7	20	15		
7	Medication delivered to bedside	1110	0900	1707	33.40"	
		40	10	51		
8	RN obtains medication	1140	0940	1710	21	
		30	30	3		
9	RN reviews MAR/Chart	1145	0941	1713	3	
		5	1	3		
10	Assesses availability of IV access	1151	0942	1713	2.20"	
		6	1	0		
11	Flushes line with saline	1152	0942	1715	1.20"	
		1	1	2		
12	Administers antibiotic	1152	0943	1720	2	
		0	1	5		
Time for 1 Cycle		112	96	140	Total cycle time	

Waste vs. Value

- **Review Process Map**

- Which activities add waste?
 - minimize/eliminate these
- Which activities add value?
 - focus resources here

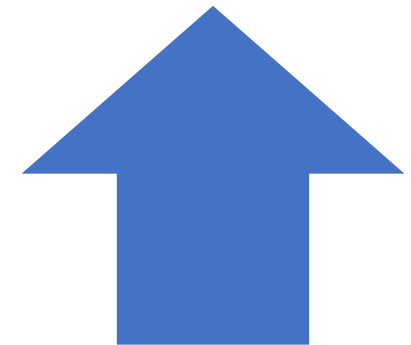


WASTE
Waiting
Late calls
Clinical errors
Unnecessary documentation



VALUE

Items/services patient
willing to pay for
Moves care forward
Done right the first
time



Defining and Minimizing Waste

Defects	Mistakes, errors, resulting rework
Overproduction	Producing too much, too soon, or setup
Waiting	For patients, providers, services, or production
Transport	Moving <u>things</u> around
Inventory	Too much or too little inventory
Motion	Moving <u>people</u> around, searching
Over-processing	Redundancy, approvals

Identifying Waste

Time Observation		
Process: Time to ABX		
Step#	Work Element	Task Time
1	Antibiotic prescribed by MD	0
2	Order verified by Pharmacist	6.40"
3	Label prints	20"
4	Pharm Tech pulls product and labels	5.40"
5	Pharm Tech makes product	23
6	Pharmacist checks medication	14
7	Medication delivered to bedside	33.40"
8	RN obtains medication	21
9	RN reviews MAR/Chart	3
10	Assesses availability of IV access	2.20"
11	Flushes line with saline	1.20"
12	Administers antibiotic	2
Time for 1 Cycle		

Defects	Mistakes, errors, resulting rework
Overproduction	Producing too much, too soon, or setup
Waiting ★	For patients, providers, services, or production
Transport ★	Moving <u>things</u> around
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Over- processing	Redundancy, approvals

Time Observation and ASB

Time Observation		
Process: Time to ABX		
Step#	Work Element	Task Time
1	Patient presents to ED	
2	Urine specimen obtained	
3	Se WHEN ARE SYMPTOMS ASSESSED? /sis	
4	Meets re WHEN ARE SYMPTOMS ASSESSED? ne culture	
5	Urine culture results	
6	Urine susceptibility results	
7	Urine culture and susceptibility data reviewed	
8	Antibiotics Prescribed	

Per order / per RN discretion?

Independent order?
Part of order set?

What are reflex criteria?
Urine culture/suspected infection?

Completed in-house?
Send-out to commercial or reference lab?

How long does this take?

What drug selected?
What duration selected?

After conducting time observations:

Conduct more observations



Identify waste



Diagram the process



Different days, different hours, different teams

Defects

Mistakes, errors, resulting rework

Overproduction

Producing too much, too soon, or setup

Waiting

For patients, providers, services, or production

Transport

Moving things around

Inventory

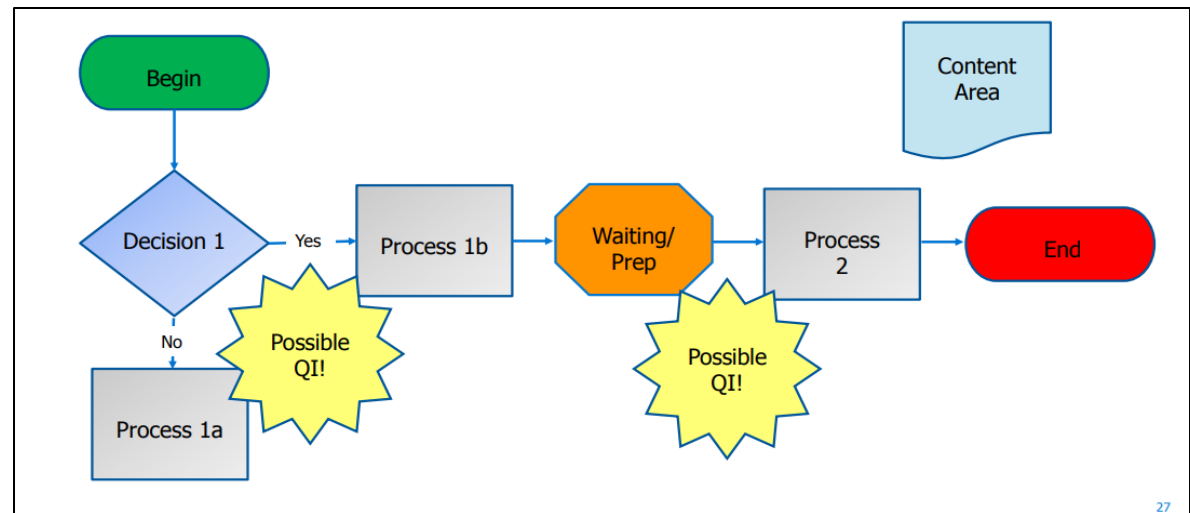
Too much or too little inventory

Motion

Moving people around, searching

Over-processing

Redundancy, approvals



Summary, Process Mapping:

- ▶ WHY Remove blinders/See with fresh eyes
- ▶ HOW Time-observation studies
- ▶ WHEN As many observations as you can, at least 3
- ▶ WHERE The clinic/ward you intend to focus interventions



- ▼ Make targeted changes
- ▼ Institution & Process-specific

Dolly Parting Advice



On the importance of Process Mapping to guide meaningful interventions:

Sometimes if you jump into something too quickly, you can screw up something that might have been good....