

FLOWS MAPPING TOOLKIT

OVERVIEW

1 DOCUMENTING SPATIAL CONTEXT *(prior to site tour)*

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1. DOCUMENTING CONTEXT *(prior to site tour)*

Documenting context is critical to help understand facility-wide factors influencing the flows of people and objects moving across surgical environments.

A. PRE-ASSESSMENT QUESTIONNAIRE *(to be filled out prior to site visit)*

FACILITY LEVEL

Location:

Date:

1. How long has your healthcare facility been in operation?

2. How would you best describe the type of your surgical facility?
(check only one)

- Freestanding, not on a hospital campus
- Freestanding, on a hospital campus
- Physically adjacent to a hospital
- Within a hospital
- Other _____

3. What categories of surgical procedures are performed at your facility?
(check only one)

- Outpatient only
- Inpatient only
- Both outpatient and inpatient

4. What types of patients are treated at your facility?
(check only one)

- Adults only
- Children only
- Both adults and children

5. What types of surgical procedures are performed at your facility?
(check all that apply)

- Orthopedics
- Cardiology
- Otolaryngology
- Pediatric Surgery
- Urology
- Ophthalmology
- Endoscopy
- Other _____

6. What are the most common types of surgical procedures performed at your facility?
(list all that apply)

7. Where is the central sterile processing department located in your facility?
(check only one)

- Same floor as surgical clean/controlled area
- Different floor as surgical clean/controlled area
- Different building (same facility)
- Different facility (third party service provider)

1. DOCUMENTING CONTEXT *(prior to site tour)*

A. PRE-ASSESSMENT QUESTIONNAIRE *(to be filled out prior to site visit)*

DEPARTMENT LEVEL			
Floor level where ORs are located:	Department gross square footage:		
8.	How many operating rooms does your facility area have?		
9.	Are there dedicated control rooms in your surgical facility? If yes, how many?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10.	Are there dedicated storage areas in the surgical clean/controlled area? If yes, how many?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11.	Are there dedicated induction rooms in your surgical facility? If yes, how many?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
12.	If instruments are processed on a separate floor from the ORs, do dedicated clean and soiled supply elevators directly connect the surgical clean/controlled area and the processing area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
13.	Are surgical instruments and supplies transported in covered case carts to and from the surgical clean/controlled area and into the ORs? If no, how are instruments and supplies transported to the OR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14.	Are all recovery levels located in the same area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15.	How many preoperative areas does your surgery facility have?		
16.	How many preoperative bays/rooms does your facility have in each area?		
17.	How many recovery levels are there in your facility?	<input type="checkbox"/> 1	<input type="checkbox"/> 2 <input type="checkbox"/> 3 or more
18.	Are all recovery levels located in the same area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
19.	How many postoperative bays/rooms does your facility have in each area?		
20.	How would you best describe the physical configuration of the surgical suite <i>(check all that apply)</i>	<input type="checkbox"/> Central clean core with operating rooms arranged around core's perimeter <input type="checkbox"/> Double-loaded corridor, where both clean and soiled flow take place in this "shared" corridor <input type="checkbox"/> Dedicated clean and soiled corridors (segregating clean and soiled flow) but no clean core <input type="checkbox"/> Other _____	

1. DOCUMENTING CONTEXT *(prior to site tour)*

A. PRE-ASSESSMENT QUESTIONNAIRE *(to be filled out prior to site visit)*

PATIENT PREPARATION (PREOPERATIVE)

21. Where is patient preparation located in your facility?
(check only one)

- Within the surgical clean/controlled area
- Adjacent to the surgical clean/controlled area
- Physically separate (not adjacent) to the surgical clean/controlled area, but on the same floor
- Physically separate (not adjacent) to the surgical clean/controlled area, but one floor above or below
- Physically separate (not adjacent) to the surgical clean/controlled area, but more than one floor above or below
- Other _____

22. What is the physical enclosure of the preoperative bays/rooms?
(check all that apply)

- Solid head wall; curtains on 3 sides
- Solid head and side walls,; curtains at foot
- All sides solid surfaces, glass, etc.
- Other _____

PATIENT RECOVERY (POSTOPERATIVE)

23. Where is patient recovery/Post Anesthesia Care Unit (PACU) located?

- Within the surgical clean/controlled area
- Adjacent to the surgical clean/controlled area
- Physically separate (not adjacent) to the surgical clean/controlled area , but on the same floor
- Physically separate (not adjacent) to the surgical clean/controlled area , but one floor above or below
- Physically separate (not adjacent) to the surgical clean/controlled area , but more than one floor above or below
- Other _____

24. What is the physical enclosure of the recovery bays/rooms:

- Solid head wall; curtains on 3 sides
- Solid head and side walls; curtains at foot
- All sides solid surfaces, glass, etc.
- Other _____

1. DOCUMENTING CONTEXT (prior to site tour)

B. PHYSICAL ASSESSMENT CHECKLIST (to be confirmed on site visit)

Mark on floor plan the location of:	Mark 'X' on 'yes' column if marked on floor plan	
Functional / Department Zone	YES	N/A
OR zone(s) <i>Includes operating rooms, procedure rooms, induction rooms, control rooms/areas, scrub sink rooms/areas</i>		
Preoperative Assessment zone(s) <i>Includes areas occupied by preoperative assessment patient beds</i>		
Postoperative Recovery zone(s) <i>Includes areas occupied by postoperative recovery patient beds</i>		
Sterile Processing zone(s) <i>Includes rooms occupied by activities related to cleaning, sterilizing and distributing surgical instruments and materials</i>		
General support zone(s) <i>Includes elevators, admission desk areas, waiting areas, storage rooms/areas, holding rooms/areas, patient and family amenity rooms/areas (toilets, changing rooms, eating areas), staff workstations, administrative offices, staff amenity rooms/areas (toilets, changing rooms, eating areas)</i>		
Circulation zone(s) <i>Includes corridors or any area which people use to walk or transport between spaces</i>		
Other		
Vehicular flow		
Patient pick-up area		
Patient drop-off area		
Main entrances		
Public entrance (for patients and family)		
Staff entrance		
Materials / supplies entrance (e.g. loading dock)		
Other		
Circulation types		
Clean circulation <i>Includes areas in which only staff members and materials/supplies/instruments considered sterile are permitted to circulate</i>		
Soiled / dirty circulation <i>Includes areas in which any staff member and materials/supplies/instruments considered non-sterile are permitted to circulate</i>		
Restricted circulation <i>Includes areas in which only authorized people like staff members are permitted to circulate</i>		
Other		

2. DOCUMENTING FLOWS *(during site tour)*

Documenting how the flows of people and objects are moving through the surgical environment is critical to understand how spatial configuration supports the surgical process. Critically examining the pathway of these flows undertakes having a human-centered approach, which is ideally constructed by overlapping the perspectives of multiple users.

A. SITE TOUR PHYSICAL ASSESSMENT

[ADD FLOOR PLAN]

Check (✓) once marked on the floor plan

Record the color code for each flow

CHECK	COLOR CODE	TYPICAL PATHWAY OF	CHECK	FUNCTIONS OF ALL SPACES WITHIN
()	<input type="text"/>	PA patient flow	()	PA patient flow
()	<input type="text"/>	FA family flow	()	FA family flow
()	<input type="text"/>	SG surgeon flow	()	SG surgeon flow
()	<input type="text"/>	AN anesthesiology team flow	()	AN anesthesiology team flow
()	<input type="text"/>	SI sterile instruments and materials flow	()	SI sterile instruments and materials flow
()	<input type="text"/>	ME movable equipment flow	()	ME movable equipment flow
()	<input type="text"/>	SU supplies	()	SU supplies
()	<input type="text"/>	WA waste	()	WA waste

2. DOCUMENTING FLOWS (during site tour)

B. SITE TOUR PHOTO ASSESSMENT

FACILITY LEVEL	YES	N/A
Vehicular flow		
<i>Patient pick-up area</i>		
<i>Patient drop-off area</i>		
Main entrances		
<i>Public entrance (for patients and family)</i>		
<i>Staff entrance</i>		
<i>Materials / supplies entrance (e.g. loading dock)</i>		
<i>Other</i>		
DEPARTMENT LEVEL		
OR zone(s)		
<i>Operating rooms</i>		
<i>Procedure rooms</i>		
<i>Induction rooms</i>		
<i>Control rooms/areas</i>		
<i>Scrub sink rooms/areas</i>		
Preoperative Assessment zone(s)		
<i>Preoperative beds/bays/rooms</i>		
Postoperative Recovery zone(s)		
<i>Postoperative beds/bays/rooms</i>		
Sterile Processing zone(s)		
<i>Cleaning/soiled room</i>		
<i>Sterilization room</i>		
<i>Distribution room</i>		
General support zone(s)		
<i>Elevators</i>		
<i>Admission desk areas</i>		
<i>Waiting areas</i>		
<i>Storage rooms/areas</i>		
<i>Holding rooms/areas</i>		
<i>Patient and family amenity rooms/areas (toilets, changing rooms, eating areas)</i>		
<i>Staff workstations</i>		
<i>Administrative offices</i>		
<i>Staff amenity rooms/areas (toilets, changing rooms, eating areas)</i>		
Circulation zone(s)		
<i>Corridors or any area in which people use to walk or transport between spaces</i>		
FACILITIES AND BARRIERS		
<i>Spaces identified by staff as facilitators in the surgical process</i>		
<i>Spaces identified by staff as barriers in the surgical process</i>		

2. DOCUMENTING FLOWS *(during site tour)*

C. SITE TOUR INTERVIEW QUESTIONS *(audio record answers and/or take notes)*

Interview questions	BEST FITTED INTERVIEWEE			
	Nurse manager	Surgeon	Anesthesiologist	Facilities manager
1. Describe and walk through the patient path and steps through the surgical process from entry to discharge.				
2. Describe and walk through the family path and steps through the surgical process from entry to discharge.				
3. Describe and walk through the surgeon path and steps through the surgical process from entry to discharge.				
4. Describe and walk through the nurse path and steps through the surgical process from entry to discharge.				
5. Describe and walk through the anesthesiology personnel (anesthesiologist, nurse anesthetist) path and steps through the surgical process from entry to discharge.				
6. Describe and walk through how and where various materials arrive, leave, and move through the facility.				
7. Describe the typical path of movable equipment through the surgical process.				
8. When and where are family members allowed to be with the patient and participate in care?				
9. Where do family members wait when not with the patient?				
10. How is flow handled between preoperative and postoperative patient care over the course of the day spatially and operationally?				
11. Do you feel the size (area and dimensions) of your operating rooms are adequate, inadequate or oversized to meet your case mix today and in the future? If inadequate or oversized, please explain how and why.				
12. Do you feel the location and number of doors of your operating rooms are adequate, inadequate, or exceeding your needs to meet your case mix today and in the future? If inadequate or excessive, please explain how and why.				
13. Does the patient enter the operating room from the same doorway as the surgical staff?				
14. Which door do nurses usually use to enter the OR? (when the OR has more than 1 door)				

2. DOCUMENTING FLOWS *(during site tour)*

A. SITE TOUR INTERVIEW QUESTIONS *(audio record answers and/or take notes)*

	BEST FITTED INTERVIEWEE			
	Nurse manager	Surgeon	Anesthesiologist	Facilities manager
Interview questions continued...				
15. Which door do anesthesiology personnel usually use to enter the OR? (when the OR has more than 1 door)				
16. Which door does the surgeon usually use to enter the OR? (when the OR has more than 1 door)				
17. Are certain operating rooms designated and designed for specific surgical procedures? If so, please explain how and why.				
18. If provided, where and how are non-surgical procedures accommodated?				
19. Where are general materials/supplies located in relation to the OR?				
20. How accessible are general materials/supplies from the operating room?				
21. Where are anesthesia supplies located in relation to the OR?				
22. How accessible are anesthesia supplies from the operating room?				
23. Where are surgical instruments and supplies processed?				
24. Where are surgical materials/supplies/instruments and equipment stored and staged for the next case in relation to the OR?				
25. When and where is movable equipment cleaned through the surgical process?				
26. Describe any facilitators (spaces and/or processes that support the flow of patient and family, staff, materials and supplies, and equipment) in your current system.				
27. Describe barriers (spaces and/or processes that hinder the flow of patient and family, staff, materials and supplies, and equipment) in your current system.				
28. Describe recent or expected updates/innovations in surgical technologies that have been or will be integrated into your facility.				