Gap Analysis Tool

7	Scorecard	
E	Gap Analysis	Process Control

Twila Burdick, MBA

Acceptance Goals

- With this tool, the user will be able to answer the question: "How well is my ED performing the D2D processes that have been implemented?"

- This acceptance assessment is based on ongoing operational monitoring of the critical process steps of D2D, followed by identification of possible issues and corrective actions that can bring the process into control.[1]

Process Management

- As with other significant changes, acceptance of the D2D Care Process after implementation requires ongoing monitoring and reinforcement.[2]

- Failure to recognize process issues and address them will result in failure to achieve outcome goals, such as reduced LWOT rates.

- The D2D Gap Analysis Tool is designed to identify the difference between current performance and the design requirements identified in previous tools.

D2D Gap Analysis

Process	Key Indicator	Trigger Point	Current Performance	Need to Address?
Patient Arrival	Patient Wait Time for Quick Reg / Quick Look			Yes / No
Care Process for Less Sick Patients	Patient Wait Time for Intake			Yes / No
Care Process for Sicker Patients	Patient Wait Time for IP$_{ED}$ Bed			Yes / No
Decision Making and Leaving	OP Discharge to Disposition			Yes / No
	IP Transfer to IP Care			Yes / No

When to Use Gap Analysis

Use the D2D Process Gap Analysis:

- After the D2D Care Process has been implemented in your ED:
  - A decision about "split flow" has been based on your volume
  - Intake and acute ED spaces are sized and resourced based on:
    - your patient volume and acuity
    - decisions you made regarding service levels (waiting times)
  - Ongoing operational responsibility for D2D is in place
  - ED outcomes using the D2D scorecard are being monitored

How to Use D2D Gap Analysis

- Complete the "Trigger Point" column
  - Review "One-up, One-down" Summary Table found in Tool 5
  - Using information in the "Waiting Time" column, transfer the selected value for Quick Look, Intake/Discharge, and IP_{ED} to the "Trigger Point" column to the Gap Analysis
  - Add "expected times" for discharge to disposition and transfer to inpatient care
- Complete the "Current Performance" column
  - Obtain process key indicator data
    - Use automated sources (e.g., your ED system) when possible
    - Pay particular attention to periods of peak volume
    - Use in "real time" (eg, today from 11 am til noon) as well as retrospectively (last week)
- Compare "Current Performance" to the "Trigger Point"
  - Determine whether current performance needs attention
    - Review the D2D Process Management Potential Issues and Corrective Actions
    - Take Corrective Actions and re-measure as appropriate
- See Completed Example

D2D Gap Analysis
(completed example)

Process	Key Indicator	Trigger Point *(from Tool 5 and/or expected times)*	Current Performance *(example)*	Need to Address?
Patient Arrival	Patient Wait Time for Quick Reg / Quick Look	6.40 minutes (example)	5 minutes	Yes / (No)
Care Process for "Less Sick" Patients	Patient Wait Time for Intake	1.42 minutes (example)	9 minutes	(Yes) / No
Care Process for "Sicker Patients	Patient Wait Time for IP_{ED} Bed	4.32 minutes (example)	5 minutes	Yes / (No)
Decision Making and Leaving	OP Discharge to Disposition	30 minutes (expected time)	25 minutes	Yes / (No)
	IP Transfer to IP Care	90 minutes (expected time)	120 minutes	(Yes) / No

D2D Potential Issues and Actions
Patient Arrival Process

Process Phase	Key indicator	Potential Issues	Corrective Actions
Patient Arrival Process	Patient Wait Time for Quick Reg / Quick Look	STAFFING --Inadequate staffing levels in Quick Registration / Quick Look --Unexpected patient arrival rate	--Check staffing against requirements; adjust appropriately --Review arrivals to confirm peak periods for staffing purposes --Develop plan for dealing with unusual "surge" situations
		CARE PROCESS --Quick Registration/Quick Look not being done in 7.5 minutes (average)	--Re-train as needed --Address individual adoption issues

Tips for Gathering this Data

If you do not have an automated system or easy access to this information on your system, consider involving patients. For example, give a patient a card with the time of Quick Reg/Quick Look and ask them to give it to the Intake Nurse, who will record the time and get this information back to Quick Reg/Quick Look.

D2D Potential Issues and Actions
Caring for Less Sick Patients

Process Steps	Key Indicator	Potential Issues	Corrective Actions
Care Process for "Less Sick" patients	**Patient Wait Time for Intake**	STAFFING --Insufficient Number of Physicians/PAs in Intake matches requirements --Number of nurses not at least equal to the number of Physicians/PAs in Intake --Intake Physicians/Nurses performing tests and treatments	--Check staffing against requirements; adjust appropriately --Review arrivals to confirm peak periods for staffing purposes --Develop plan for dealing with unusual "surge" situations
		PATIENT MIX -Wrong patients in Intake	-Confirm that all "less sick" patients (e.g., ESI 4,5) are sent to intake --Confirm that moderately sick patients (e.g., ESI 3) are being sent to Intake (should be about 90%) with exceptions based on clear criteria --Check "sick/less sick" (e.g., ESI) identification inter-rater reliability; should be greater than 80%
		CARE PROCESS --Intake Medical Screening Exam not being performed in15 minutes (average) --Tests and Treatments being done in the Intake Area	--Standardize MSE process to meet timeframes and include history and review of systems --Provide feedback/training to individual caregivers --Address concerns regarding physician compensation --Perform and document MSE jointly (physician and nurse) --Clarify location and staffing for tests and treatments --Address issues regarding "hand-offs" between caregivers
		PATIENT FLOW --Less Sick patients move to the next step within 5 minutes of MSE completion	--Clarify responsibility for patient movement

D2D Potential Issues and Actions

Caring for Sicker Patients

Process Steps	Key Indicator	Potential Issues	Corrective Actions
Care Process for Sicker Patients	**Patient Wait Time for ED Bed**	PATIENT FLOW --Wrong patients sent to Acute ED beds	--Confirm that all "less sick" patients (e.g., ESI 4,5) are sent to intake --Confirm that moderately sick patients (e.g., ESI 3) are being sent to Intake (should be about 90%) with exceptions based on clear criteria --Confirm that about 20% of moderately sick patients seen in Intake are sent to Acute ED after MSE --Check "sick/less sick" (e.g., ESI) identification inter-rater reliability; should be greater than 80%
		SPACE ALLOCATION --Inadequate number of acute ED beds to accommodate sicker patients	--Confirm that the number of acute ED beds meets requirements
		PROCESS --Inpatient transitional care taking place in acute ED beds	--Confirm criteria for sending patients to Results Waiting --Ensure that Results Waiting includes loungers and chairs for patients that are waiting for results and/or need additional time to determine disposition --The number of nurses and techs in Results Waiting matches volume requirements

D2D Potential Issues and Actions
Decision Making and Leaving

Process Steps	Key Indicator	Potential Issues	Corrective Actions
Decision Making and Leaving	**OP Discharge to Disposition**	PROCESS --Delays with Informed discharge: vital signs within one hour of discharge, time and action specific instructions documented on patient record (90% compliance)	--Confirm resources and process for informed discharge
	IP Transfer to IP Care	PATIENT FLOW --Admitted patients held in acute ED bed	--Confirm resources and process for transferring admitted patients to inpatient care

Final Step - Celebrate!

- By this point, you have made significant progress in improving ED patient safety.
- Recognize the people who have been involved in the success.
- Continue to provide process and outcome information to the people involved in the process.
- Look for additional way to improve ED patient safety.

NEVER STOP

References

[1] Juran JM. *Juran on Quality by Design*. New York: The Free Press; pp.14 – 19. 1992.

[2] Brassard M, Finn L, Ginn D, et al. *The Six Sigma Memory Jogger^{TM}II* NH: GOAL/QPC; pp. 199-203. 2002.