### IPRO HQIC Quality Improvement 101 Course Content Class #2 'Do' Phase of PDSA

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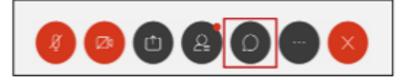


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#### How to Use the Chat Box Feature

#### To send a Chat Message:

Open the Chat Panel



- > Scroll All the Way Down
- > Select "Everyone"
  - > Do not select
    - "All Attendees"
- Type message in Chat Text Box, press Enter on your keyboard

Everyor	ne
Sophia	Cunningha (Host)
Rebecc	a Steinfield (IHI) (Presenter)
Abby Zie	er Alyesh
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Edy	
emunen	e
Jeff Wet	herhold
jennifer	
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#### **Questions and Participation**

- If you prefer to ask your question live, please raise your hand and your line will be unmuted.
- There are several opportunities to participate during today's class so please feel welcome to share during polling questions.



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#### **Today's Objectives and Speakers**

- Describe a "Waste Walk"
- Describe the process to complete a 5S
- Describe Visual Management
- Describe Voice of the Customer and Voice of the Business
- Describe a small test of change, rapid cycle improvement



**Gloria Thorington, RN, CPHQ, CPPS, CSSGB** Quality Improvement Manager Healthcentric Advisors

**IPRO HQIC** 



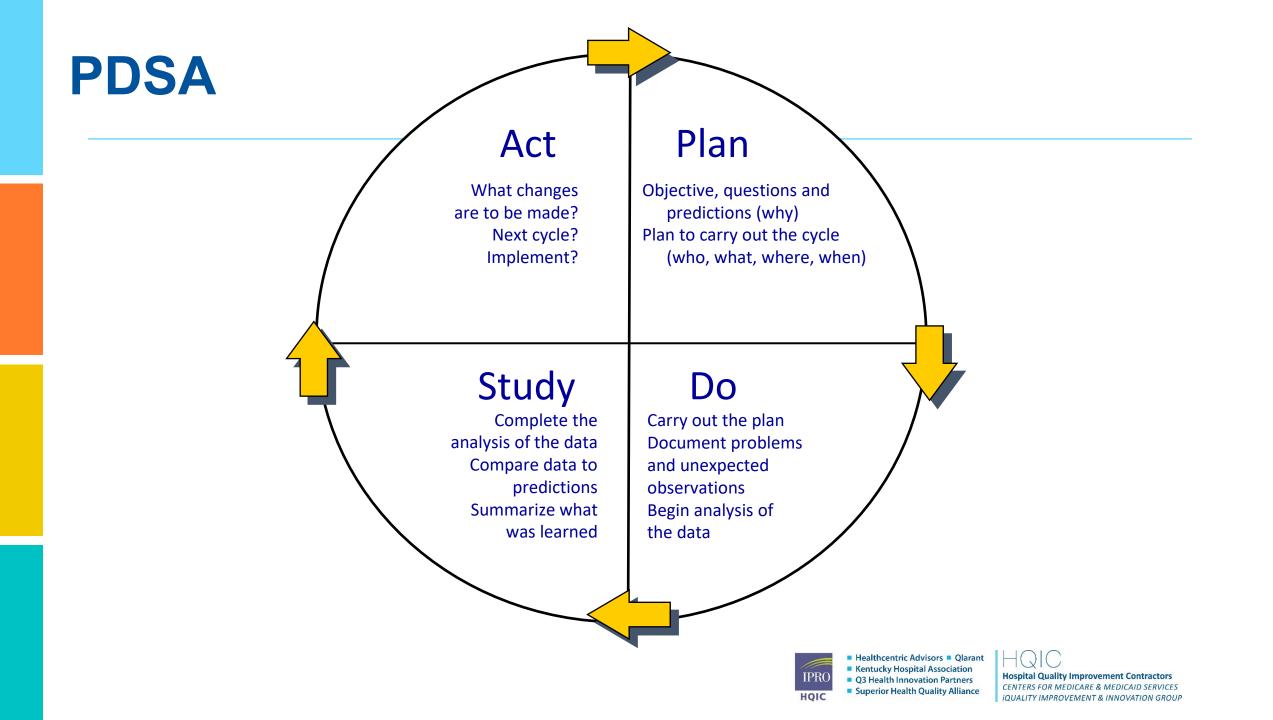
**Kristy Shafer** Quality Improvement Advisor, Superior Health Quality Alliance

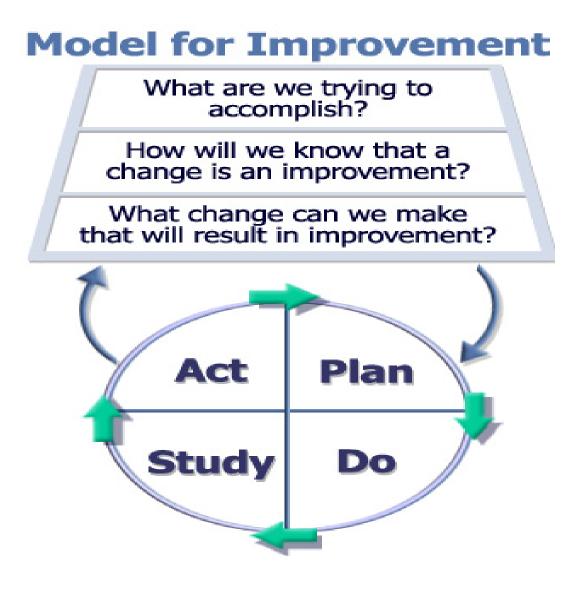
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#### When you combine the 3 questions with the PDSA cycle you get the Model for Improvement

W. Edwards Deming

The Improvement Guide, API, 1996



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#### **Model for Improvement**

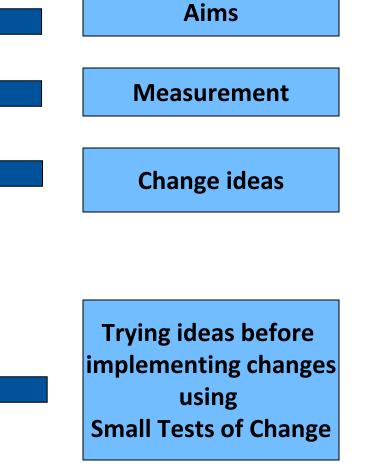
What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?



The Improvement Guide, API, 1996



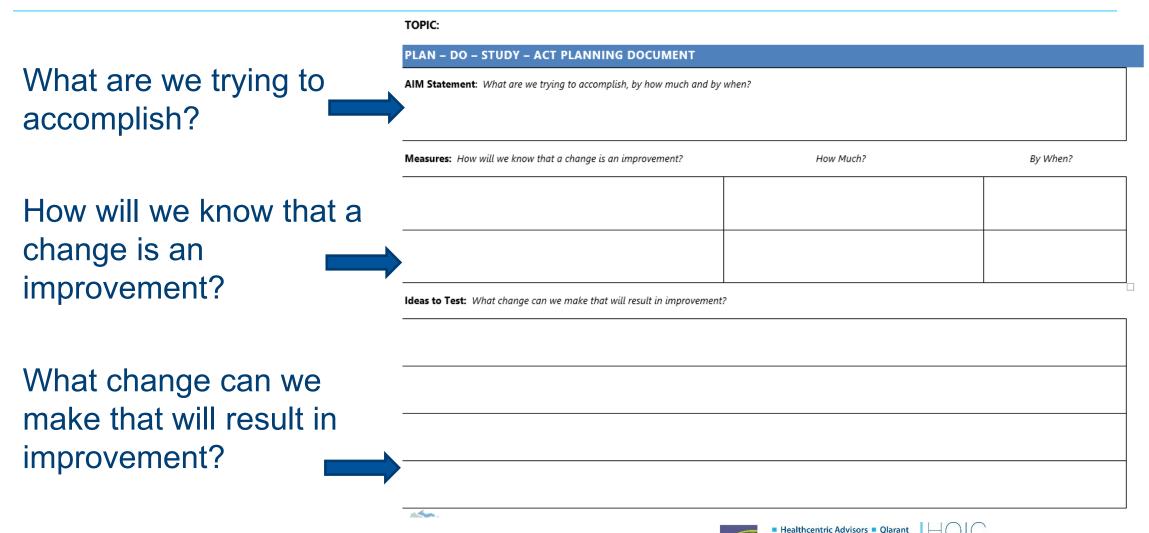


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### **PDSA Planning Document**







### **PDSA Planning Document - Save \$\$\$**

TOPIC:

Food Expense

#### PLAN – DO – STUDY – ACT PLANNING DOCUMENT

AIM Statement: What are we trying to accomplish, by how much and by when?

#### Decrease spending on food by 15% by 12/31/2022

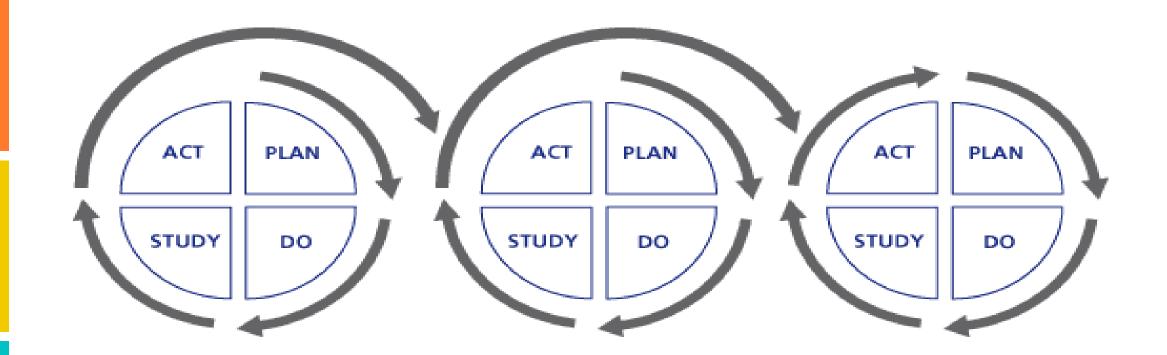
<b>Measures:</b> How will we know that a change is an improvement?	How Much?	By When?
Total food spend	Decrease by 15%	Dec 31
Weekly grocery bill	Decrease by 10%	Sept 1st

Ideas to Test: What change can we make that will result in improvement?

Preplan meals, buy only what is on the grocery list		
Buy generic/store brand when possible	How?	



# What change can we make that will result in improvement?





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### **Small Test of Change**

- Allows for trying out new ideas quickly and costefficiently
- Brainstorm improvements and implement on a small scale
- Measure results and improve upon those results
- Benefits: creates change agents and saves money





#### **Reasons to Test Changes**

- Increase belief that the change will result in improvement
- Decide whether the proposed change will work in your department
- Evaluate how much improvement can be expected from the change
- Involves many people
- Minimize <u>resistance</u> upon implementation
- Decide which of several proposed changes will lead to the desired improvement







### **Designing Small Tests of Change**

#### Key Information before beginning:

- What is the test?
- What is the smallest unit of change?
- Who has to change?
- How many staff need to change? •
- How many staff need to test the change?  $\bullet$
- When will the testing take place?



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#### **How Small Is Small?**

Remember the "Rule of One" One nurse One patient One shift One hour One time





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- Small scale test to be used on a larger scale
- Clear goals, short duration, willing unit or participants, plan, feedback mechanism
- Address any issues before large scale implementation
- Product change
- Process change

Keup (2020)



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### **Preparing your Testers**

- Explain the purpose and importance
- Clarify expectations around participation (start with volunteers)
- Be Clear about the volunteers role:
  - Trial / test the new intervention
  - Provide feedback
  - Suggest Improvements
- Gather progress measure data on the test show improvement



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#### **Time to Test the Ideas**

<u>Aim:</u> Reduce readmissions of patients discharged to home from Med-Surg 4 achieving a 12% reduction by December 31, 2022.

<u>Measure:</u> A consistent phone script will be used for 100% of follow-up calls.

**<u>Test:</u>** Develop standardized phone script for discharge calls.

#### Idea Testers:

- People that do the work should be testing the ideas
- Bedside nurses



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### **Small Test Design Plan**

#### **Model for Improvement** TOPIC: What are we trying to accomplish? DESIGN PLAN FOR SMALL TESTS OF CHANGE Idea for Testing: Smallest Unit of Change: How will we know that a Work Groups Impacted by Test: \_\_\_\_\_ Total # of Staff Impacted: \_\_\_\_\_ change is an improvement? Planned Testing Timeframe: Total # of Staff to Test: What change can we make that will result in improvement? Test Description Test Plan Testers Lesson(s) Learned Decision Adaptation □Adapt □Adopt □Abandon 2 □Adapt Act Plan □Adopt □Abandon 3 □Adapt □Adopt Study Do □Abandon 4 □Adapt □Adopt □Abandon



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Initiative: Develop standardized phone script	Intervention:	Developing a standardized phone script to use for d/c patients
Smallest Change: 1 RN	Scope: Med/Surg 4	Total # of Staff Impacted: 40
Planned Testing Timeframe: 8/1/2022 to 8/31/2022		Total # of Staff to Test: 10

	Test Description	Test Plan	Testers	Lesson(s) Learned	Decision	Adaptation
D	Draft a new script	Draft script by 8/4 and test with 2 patients by 8/8	Sue, Alice and Mary	Medication question was confusing to patients	Adapt □Adopt □Abandon	Record the medication questions and trial again
۲ 	Test the revised script	Each person to make two calls the week of 8/11 using the revised script	Sue, Alice and Mary	Script works well and helps direct patient questions and follow-up	Adapt □Adopt □Abandon	Test script next week with 5 additional nurses
1 1	Test script with 5 additional nurses	Each person to make two calls the week of 8/14	Sue, Alice, Mary, Tom, John, Jill, Beth and Anne	Script works well	Adapt □Adopt □Abandon	Add two more to the test and trial for one more week
N	Test script for one more week with 10 total nurses	Each person to make two calls the week of 8/21	Sue, Alice, Mary, Tom, John, Jill, Beth, Anne, Joe and Ginger	Script works well	□Adapt ¥Adopt □Abandon	Script works well – implement with all staff
					□Adapt □Adopt	
					□Adapt □Adopt	
					□Abandon	19

### **Designing the Tests**

- Begin with the smallest unit of change possible
  - "Rule of 1's": One care team, one patient, one day
- Plan for easy and efficient collection of feedback from your volunteer 'testers'
- Spread systematically:
  - 1 day  $\rightarrow$  2 days  $\rightarrow$  4 days and/or
  - 2 teams/ 1 patient  $\rightarrow$  2 teams/ 4 pts  $\rightarrow$  4 teams/ 8 pts
  - Pair an experienced tester with someone new
- Know when to report progress & to whom



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### **Successful Cycles to Test Changes**

- Plan Multiple Cycles For A Test Of A Change
- Think A Couple Of Cycles Ahead
- Make The 'Ask' Small By Starting Small
- Test With <u>Volunteers</u>
- <u>Do Not Wait</u> To Get Total Buy-in Before Starting
- Be Innovative To Make Test Feasible
- Collect Useful Data During Each Test
- Test Over A Wide Range Of Conditions



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### **Gathering Feedback during Tests**

You will be more efficient, and improve faster, if you do not rely solely on scheduled meetings to gather feedback:

- Quick "standing" huddles
- Patient Feedback
- White board / sticky notes
- E-mail
- Quick surveys
- 5 minute phone calls





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The basic decision point after each cycle of testing:

- Adapt the test shows improvement is needed OR the tipping point has not been reached yet
- Adopt the test shows the process or tool is stable and is ready for use
- Abandon the test didn't work <u>OR</u> some aspect of change should be abandoned



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### **How to Move Forward with Testing**

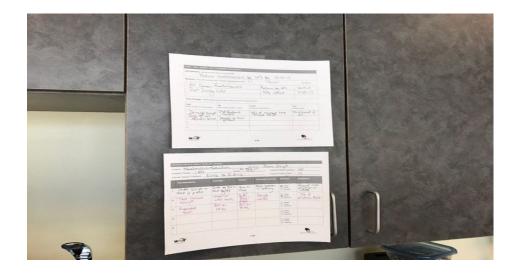
- Expand the number of participants
- Expand the scope of tests
- Expand the conditions of the test weekends, nights, etc. (*i.e. the tests are not abandoned when census is high or staffing is low*)
- Document what is learned from each cycle of testing
  - Keeps the team "on task"
  - Clarifies the reason for testing
  - Demonstrates clear accountability
  - Enhances the learning from small tests because you can see what happened virtually in "real time".

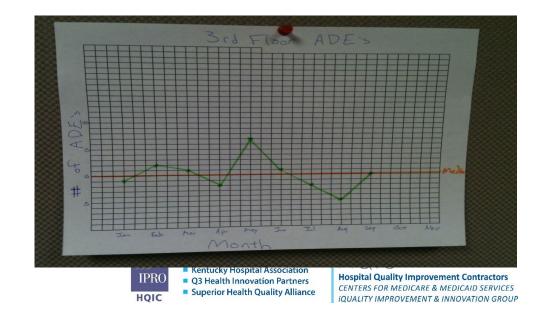




#### **Be Transparent and "Public"**

- 1. Post the PDSA sheet where staff can see what you are up to
- 2. There should be something new on it every few days this is a living document
- 3. Show how your data looks post it
- 4. It's okay to post copies of hand-written PDSA sheets





#### **Keys to Success**

- Engage the engaged
- Be absolutely clear about what is expected
- Be transparent with ALL staff about the testing
- Gather feedback <u>frequently</u> and <u>easily</u>
- Stay agile and flexible
- Don't give up easily!
- FAIL often and learn quickly





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### When are you "done" with testing?

- Everyone who needs to test the change has
- The process is stable, with few changes
- Staff are satisfied with the current state
- Your measure is moving in the right direction



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## **Project Planning**



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#### **Project Plans and Documents**

QI project teams use assessments, plans and other relevant tools and documents to guide their activities and efforts in addressing a specific priority, topic or problem.

These include:

- Project charter
- Overarching project plan and relevant documents
  - Project planning form
  - Driver diagrams
  - SMART goals/Aim statements
  - Action plans
  - Data management plan
  - Communication plan



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#### **Project Initiation: Develop Project Charter**

- Project Charter clearly establishes goals, scope, timeline, milestones, team roles and responsibilities
- Living document Helps teams stay focused on what trying to accomplish
- Answers key questions
  - What is the problem and where is it occurring?
  - Who is the customer?
  - How does the problem impact the customer?
  - What's being measured?
  - What's in and out of scope?
  - What are the timelines for the project phases?

	PF	ROJECT OVERVIEW			
Name of Project:					
Problem to be solve	ed:				
Background leading	up to the need for this	s project:			
<ul> <li>Tip: Reference s</li> </ul>	pecific background doo	uments, as needed.			
The goal(s) for this p					
	goal; See Goal Setting				
•	ry that tells where the	project begins and e	ends.		
The project scope in	cludes:				
roject Approach					
Recommended Proje	ct Time Table:				
	PROJECT PHASE		START	DATE	END DATE
Initiation: Project ch	narter developed and a	pproved			
Planning: Specific ta	sks and processes to a	chieve goals defined			
Implementation: Pr	oject carried out	_			
Monitoring: Project	progress observed and	l results			
documented					
Closing: Project brou	ught to a close and surr	nmary report		Т	
written					
roject Team and Re	sponsibilities				
TITLE		ROLE		PER	SON ASSIGNED
Project Sponsor	Provide overall direc	tion and oversee fina	ncing for		
	the project		-		
Project Champion	Helps influence and	obtain consensus from	m peers		
Project Manager	Manage day-to-day p	project operations, in	cluding		
		ying data from the pr	oject		
Project Leader	Initiates project and				
Project Facilitator	Assist the process an		nt		
Topic SMEs	Provide knowledge,				
Team Members	Directly involved wit	h day-to-day process			
Material Resources B	equired for the Projec	t (e.g., equipment, so	oftware, sup	oplies):	
Barriers					
	et in the Way of Succes	-c2 W	hat Could \		hout This?
What Could Ge	et in the way of Succes	554 VV	nat could i	OU DO AI	oout mis:
		I			
Project Approval					0.175
TITLE	NAME	SIGNATURE			DATE
Administrator					
Project Sponsor					
Project Champion					
Project Manager*					



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#### **Project Planning Form**

## **Project Initiation & Ongoing Updates**

- Helps teams think systematically
- At a glance full project picture
  - Includes drivers, process measures & goals
- Tracks all tests of change, PDSA cycles, person responsible & timeline for each phase of work

Team:			Project:														
Driver – list	the drivers you'll be	working on	Process M	easure		Goal											_
1.																	
2.																	
3.																	
4.																	
5.																	
6.																	
Driver	Change Idea	Tasks to Prepar	e for Tests	PDSA	Person				ïmeline (T = Test; I = Implement; S = Spread)								
Number (from					Responsibl		Veek										
above)						1	2	3	4	5 6	5 7	8	9	10	11	12 1	13
											+	-					
						_		-			-						
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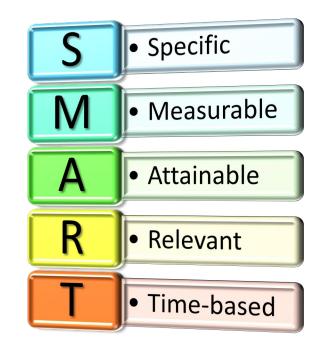
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#### **Establish SMART Goals**

#### Goals serve as the team's vision of what it wants to accomplish

#### Create SMART goals to provide context, direction and purpose

- Specific describe what you want to accomplish, who will be involved/affected and where it will take place
- Measurable describe how you will know if goal reached
  - Measure to be used and current data for it (e.g., count, % or rate)
  - State if want to increase or decrease the number
- Attainable state rationale for setting the goal measure (e.g., based on a best practice, average score or benchmark
- Relevant describe how goal addresses the problem
- Time-based define timeline and target date for achieving the goal



#### Sample goal: Improve staff hand hygiene compliance on 4 West from 80% to 100% within 3 months





### Ask yourself the three questions below:

- What am I trying to accomplish?
- How will I know that the change is an improvement?
- What change can I make that will result in an improvement in my department?





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# Other Things to Consider during SMART goal development

- Voice of the Customer
  - The customer's expectations, preferences and aversions.
- Voice of the Business
  - Financially driven
  - Resource driven
  - Data Driven



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	S	M	A	R	
What do you want to achieve this week/month/Quarter or year?	Explain exactly what you want to accomplish.	How will you be able to measure progress during and/or after?	Is this attainable this week?	Is it realistic?	When do you want to accomplish this?
Clean garage.	Have kids help me put all of the sports equipment into the right bins.	When I can fit the car in the garage	Kids have week off from school, my back is better, so yes.	Yes, we have all the bins we need.	By the end of kids' break, 11/29.
Click to add text	Click to add text	Click to add text	Click to add text	Click to add text	Click to add text
Click to add text	Click to add text	Click to add text	Click to add text	Click to add text	Click to add text



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### **Practice**

- SMART Goal for trialing External Urinary Devices to reduce Indwelling Urinary Catheters on our unit.
- 2 minutes
- Place your SMART goal in the chat box.





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# Assignment #3 – Use the SMART Goal Template to develop the SMART Goal for your project

	S	M	A	R	Т	
What do you want to achieve this week/month/Quarter or year?	Explain exactly what you want to accomplish.	How will you be able to measure progress during and/or after?	Is this attainable this week?	Is it realistic?	When do you want to accomplish this?	
Clean garage.	Have kids help me put all of the sports equipment into the right bins.	When I can fit the car in the garage	Kids have week off from school, my back is better, so yes.	Yes, we have all the bins we need.	By the end of kids' break, 11/29.	
Click to add text	Click to add text	Click to add text	Click to add text	Click to add text	Click to add text	
Click to add text	Click to add text	Click to add text	Click to add text	Click to add text	Click to add text	



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# **PDSA Action Plan Template**

PDSA - (Project Name) - Action Plan

PDSA Step	Торіс	Owner	Steps - Action Items	Evaluation of Effectiveness
	Communication		1. Communication template	
	Plan initiated		<ol><li>Develop message to pass to stakeholders about</li></ol>	
			project	
			3. Disseminate information to stakeholders	
	Form the Team		<ol> <li>Invite key stakeholders to join the team</li> </ol>	
			2. schedule team meeting	
			<ol><li>prepare for the meeting</li></ol>	
	Review the		1. Designate team member(s) to review charts for the	
	current state with		last 5 events or last 5 patients at risk with a process	
	a Root Cause		discovery tool/roadmap or use other RCA tool	
	Analysis Tool			
Г	List the areas for		1. Team reviews the opportunities from the process	
Ţ	improvement		discovery tool	
Plan	Prioritize the		1. Use the priority matrix or other method to select	
_	problem to solve		the priority problem to solve	
	using the priority			
	matrix			
	Brainstorm		1. Use one of the brainstorming methods to solve the	
	Solutions for the		priority problem.	
	priority problem			
	Prioritize the		1. Use the priority matrix or other method to select	
	solution to		the priority solution to solve the problem	
	implement using			
	the prioritization			
	matrix			
	Review and		<ol> <li>List and solve for any potential barriers or</li> </ol>	
	problem solve for		resistance to implementing the priority problem	
	any barriers		solution.	
	Develop Action		1. Use the Action plan template to list steps for	
	Plan for		implementing the priority solution	



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# **Action Plan**

- Implement action items for each solution
- Some solutions may have multiple action items
- Assign the action items to an individual or group
- Due Date
- Ensure appropriate resources are available to complete all tasks for the action items



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# **Simple Action Plan**

What	Who	When	Status
Invite Pharmacist to the next meeting	Sandy	By July 1, 2021	Invitation sent to pharmacist on 5/20/21



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# Assignment #5 – Use the PDSA or other action plan template to document you project process

#### PDSA - (Project Name) - Action Plan

PDSA Step	Торіс	Owner	Steps - Action Items	Evaluation of Effectiveness
	Communication		1. Communication template	
	Plan initiated		<ol><li>Develop message to pass to stakeholders about</li></ol>	
			project	
			<ol><li>Disseminate information to stakeholders</li></ol>	
	Form the Team		<ol> <li>Invite key stakeholders to join the team</li> </ol>	
			2. schedule team meeting	
			<ol><li>prepare for the meeting</li></ol>	
	Review the		1. Designate team member(s) to review charts for the	
	current state with		last 5 events or last 5 patients at risk with a process	
	a Root Cause		discovery tool/roadmap or use other RCA tool	
	Analysis Tool			
J	List the areas for		1. Team reviews the opportunities from the process	
T	improvement		discovery tool	
Plan	Prioritize the		1. Use the priority matrix or other method to select	
_	problem to solve		the priority problem to solve	
	using the priority			
	matrix			
	Brainstorm		1. Use one of the brainstorming methods to solve the	
	Solutions for the		priority problem.	
	priority problem			
	Prioritize the		1. Use the priority matrix or other method to select	
	solution to		the priority solution to solve the problem	
	implement using			
	the prioritization			
	matrix			
	Review and		<ol> <li>List and solve for any potential barriers or</li> </ol>	
	problem solve for		resistance to implementing the priority problem	
	any barriers		solution.	
	Develop Action		1. Use the Action plan template to list steps for	
	Plan for		implementing the priority solution	



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#### **Participant Question**

# How do you hold your stakeholders accountable for completing tasks timely at your facility?

#### Please enter your answers in the chat box.





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### Questions

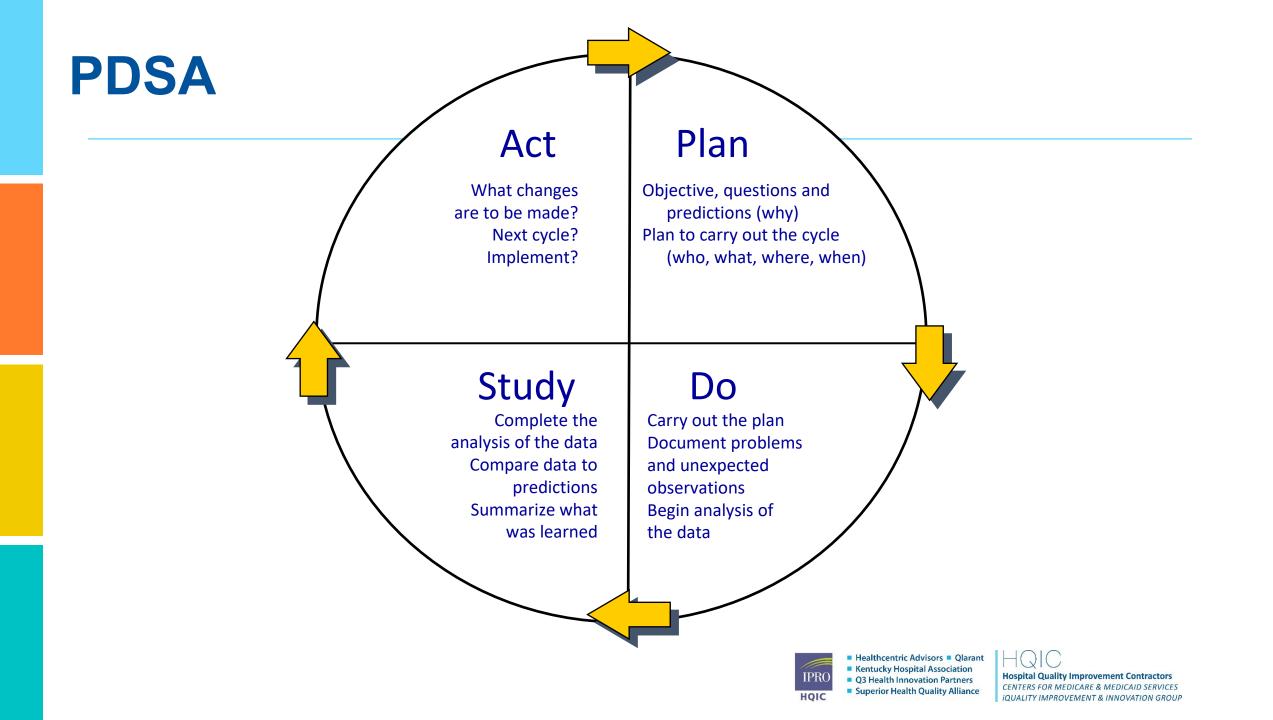






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# **Standard Work**

The written, current best method for safe and

efficient work that meets

the required quality and

provides the standard for

continuous improvement.

Created by the team leader

Systematically changing as workers continuously improve the operation

**Readily Available** 

A System for closely checking the actual performance of the work



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# **Standard Work**

Standard Worksheet/Job Instruction Sheet Hospital:									
Functional Area	Endoscopy	Process Name	Sampling Duodenoscopes - Distal cap seams (Step 1 of 3)	Creation Date:	Signature:				
Department Director		Process ID Number		Revision Date:	Signature:				
Team Leader/Owner		Position Responsible/Role	Endoscopy Tech	Review Date:	Signature:				

Seq.	Major Steps/Element Description	Performed	Check	Workflow diagram
No.		Ву		Required PPE: Sterile Gown, Sterile Gloves, Mask and eye protection, Bouffant
1	Assemble supplies and equipment including: PPE, surface disinfectant, sterile drape, lighted magnification, sterile collection container, specimen label, 45ml Dey-Engley, sterile water, sterile alcohol wipe, sterile swab, 2 pipettes, sterile brush and scissors, (2) 30ml and (1) 5ml syringe.	Sampler & Facilitator	0	
2	Perform hand hygiene.	Sampler & Facilitator		
3	Label the sterile sample container with duodenoscope device number, channel/sites sampled, date, time, and identification of sampler.	Facilitator	25	
4	Don fluid resistant face-mask, eye protection and exam gloves.	Sampler &Facilitator	$\bigcirc$	
5	Disinfect counter with appropriate surface disinfectant starting from back of counter working towards front.	Sampler &Facilitator	O	5     6     7     8     1
6	Don Sterile PPE	Sampler &Facilitator	$\bigcirc$	
7	Place sterile pad or drape on counter.	Facilitator	$\bigcirc$	
8	Retrieve duodenoscope and place on sterile pad or drape, taking care to avoid contact with the elevator recess	Facilitator	$\bigtriangleup$	



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Fund	tional Area	Process Excellence		ard Works	sheet/Job	Instruction		1	Creati	on Date	Hospit				
runci	lional Al Ca	Frocess excellence	Proce	CSSINGINE		Boat Assembly		Creation Date: 21 Feb 17			Signature:				
Depa	rtment Director	D. Worthy MD	Proce	ssIDNumb	ber				Revisi	on Date	:	Signatu	re:		
Team	Leader/Owner	S. Myers	Positi	on Respons	sible/Role	Team mem	ber		Review	w Date:		Signatu	re:		
Seq.	Major Steps/El	ement Description	Performed	Time	Workflo	w diagram or	layout	of locat	ion whe	ere wor	k is done				
No.	100 March 10 March 10 March 10		By	02280	Require	d PPE: Eye Pro	otectio	n, Glove	s						
1	Don PPE		Team member	30 sec	1		2			3			4		
2	Ensure the six p present and in	arts for boat are	Team member	30 sec				anna (			222222			00	
3		e placed in order	Team member	30 sec	E.	N								00	
4	Place 6X2 piece	ontable	Team member	5 sec	5		6	TTT		7			8		T
5	Place 3X2 slope side down on fr piece	d piece rounded ont half of 6X2	Team member	5 sec		.888		<b>A88</b>	3 3 3		228	888			
6	Place 3X2 secon back half of 6X2	nd sloped piece on 2 piece	Team member	5 sec		3		-	-		-				
7	Place 4X2 piece blue sloped pie light blue shape	ces, covering all	Team member	5 sec											
8	Place light blue piece on dark b row of 1X2 show	lue 4X2 with one	Team member	5 sec	9		1	0		2	X				
9	Place triangle s top of person li	haped piece on	Team member	5 sec											-
10	Ensure all conne	ections are tight	Team member	5 sec			·			7					_
11															
Appr	oval:		Date:		Std Proce	\$5			Quality Check	7	5	Safe	ety C	<u>}</u>	



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# Training

- Qualified Trainer/Preceptor
- Correctly, Consistently and Safely
- All necessary training items include PPE if appropriate
- Skills Consider Simulation practice at least 4-5 times
- Practice the same way the skill will be performed



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#### **Training – Simulation – Telling alone is not enough!**

- Simple things sound complicated
- Poor choice of words, too many words
- Motions hard to describe
- Too much information at one time
- If the Student has not learned.... The Instructor has not taught!



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#### **Training – Simulation – Showing alone is not enough**

- Perspective for watching
- Motions are difficult to see
- Copying doesn't equal understanding





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### **Train like we fight! Get Ready**

- Competency, Standard Work Tool
- Break down the skill into major steps and key points
- Have everything ready for the trainee i.e. equipment, PPE, supplies
- Workplace should be arranged in the way the trainee will be expected to keep it (5S)
- Trainer resets work area for trainee practice



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# **Document Skills**

Pre-test/Post-test

# Competency Template

• Training Record

#### RN Head to Toe Skin Assessment

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Competency Statement: The RN has completed facility education and competency verification for the adult head to toe skin assessment.

Outcome Statement: The patient is free from signs and symptoms of pressure injuries or skin breakdown.

Comp	etency Statement	Verification Method (Demonstration, Skills Lab Simulation, Knowledge Test, Observation, P & P Review)	Skill Level – Novice, Competent, Advanced	Met or Not Met – Explain why if not met.
1.	Assembles, supplies, equipment and PPE for skin assessment.			
2.	Partners with RN for <u>two</u> person skin assessment.			
3.	Explains the procedure to patient and family member.			
4.	Verifies patient and family member understanding and documents.			
5.	Inspects the head and face, looks for symmetry, wounds, scars, or abnormalities. ** Examines the patient's face and head for any abnormalities from medical device ie. Ears for skin injury due to O2 tubing			



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#### **Voluntary Assignment - for practice and learning**

- Complete the waste walk template
- Use the 5S checklist to complete a 5S project
- Use the Goal Setting Template to establish your Small Test or Rapid Cycle SMART goal
- Review one toolkit related to your project
- Use the Action Plan Template and Project Charter to document your project steps
- Meet with your coach next week



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#### Value Added vs. Non-Value Added Analysis

- Voice of the Customer
- Voice of the Business
- What is Value?
- What is Waste?
- Why don't we see the waste?





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#### **Tips for Waste Identification**

- Waste is anything that doesn't add value to the patient/provider/staff
- Opportunity to engage the Patient and Family Advisory Council or the patients and family members assigned to your QI Team to assist in identifying waste from the patient's perspective
- Sometimes you may need "fresh eyes" or have to step away to see waste (dedicate time to do this)
- Identification and elimination of waste is not a one-time activity Continuous Improvement





#### Let's Practice Identifying Waste In a Process

- Parking
- Registration
- Lost
- Arrives in Lab
- Sent to waiting room
- Waits
- Registration
- No tourniquets



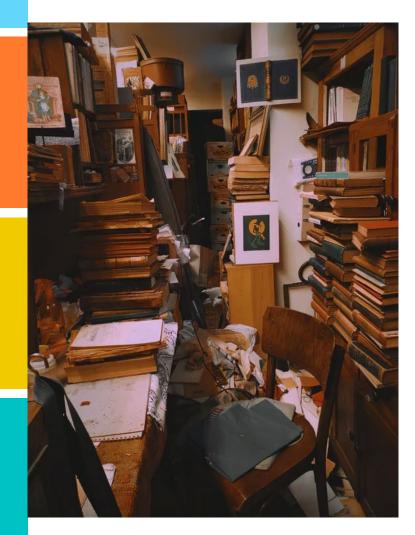
- Tourniquet found
- Lab drawn

 Which of these steps are value added for the patient? Non-Value Added? Non-Value Required?



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# Waste Walk – 8 Categories of Waste





**T**ransportation Inventory **Motion Underused Talent** Waiting **Overproduction Overprocessing** Defects



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# Transportation

- Excess movement of info/materials/people
- Consider electronic movement of forms as well
- Adds to time of the process
- Indirect cost as well as capacity utilization







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# **Inventory Excess**

• Excess stock, supplies, print materials

 Waste from expired or unusable inventory

 Adds to direct costs of the operations





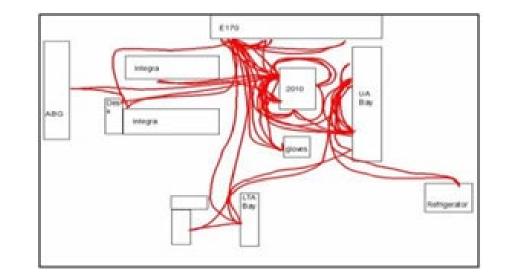


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# Motion

- Excess moving (bending, turning, reaching, walking, searching, etc.)
- Causes delays, frustration and capacity utilization
- Indirect cost to the process
- Usually related to poor layout





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# **Unused Creativity**

- Skills and talents of staff not utilized
- Not a thinking system
- Decision making is only at highest level
- Causes frustration
- No sense of ownership to the process/ service





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# Waiting

- Multiple sources, not just people but information and materials as well
- Causes frustration to the customer (internal or external)
- Adds to total time for process and indirect cost







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# Overprocessing

- Unnecessary extra activity or processing
- Redundant orders, collecting or documenting more than required information



 Results in frustration, added time and indirect cost

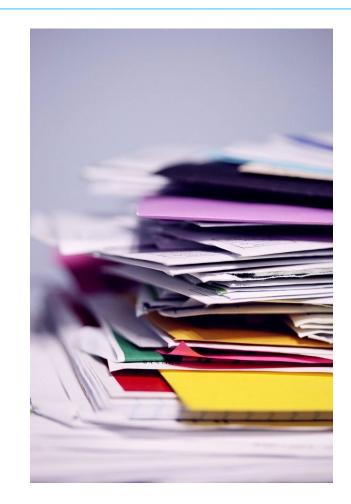


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# Overproduction

- Wasted effort, capacity
- Causes frustrations

Adds to cost of the process

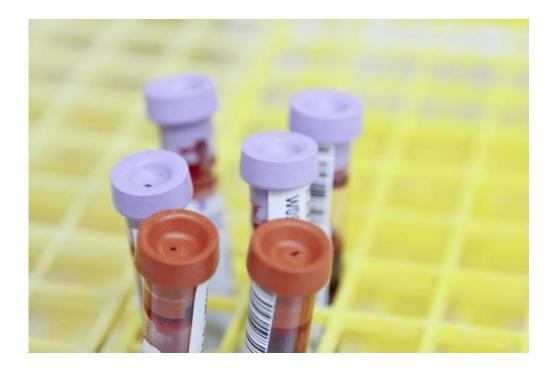




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#### **Defects**

- Can happen anywhere
- Results in additional or reprocessing adding no value to the customer
- Causes delays in the process
- Direct cost to the process





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### Assignment #1 Identify 3 of the 8 Wastes (Facility or Home)

Waste	Description	Identified Item for Improvement
Transportation	Excess movement of	
	info/materials/people	
Inventory Excess	Excess stock, supplies, print	
	materials	
Motion	Excess moving (bending,	
	turning, reaching, walking,	
	searching, etc.)	
Underused Talent	Skills and talents of staff not	
	utilized	
Waiting	Multiple sources, not just	
	people but information and	
	materials as well	
	Causes frustration to the	
	customer (internal or external)	
	Adds to total time for process	
	and indirect cost	
Over Production	Wasted effort, capacity	
Over Processing	Unnecessary extra activity or	
	processing	
Defects	Results in additional or re-	
	processing adding no value to	
	the customer	



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### Questions







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# 5 S

- Improved safety
- Higher equipment availability
- Lower defect rates
- Reduced costs
- Increased production agility and flexibility
- Improved employee morale
- Better asset utilization
- Enhanced enterprise image to customers, suppliers, employees, and management

5S Tutorial – ASQ https://asq.org/quality-resources/lean/five-s-tutorial



Sort

- Look for excess inventory
- Clear out junk
- Look for obsolete and expired items
- Identify what is required to work a process or perform a particular task – then remove unnecessary tools, equipment, files, binders, parts....





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# **Sorting Activity Steps**

- Establish criteria and explain the handling of items
- Assign zones to people if working on a large area
- Conduct a red tag event place red tags or sticky dots on unnecessary items and move to holding area
- Log/document items removed





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- A place for everything and everything in its place
- Bins, Labeling
- Like supplies together and at point of use
- Make it obvious if something is missing





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# **Steps to Set in Order**

- Identify key equipment and supplies
- Determine location for every item
- Outline locations of equipment, supplies, common areas, and safety zones
- Develop shadow boards if needed
- Label items
- Determine PAR Levels
- Document workplace layout, equipment, safety zones and supplies



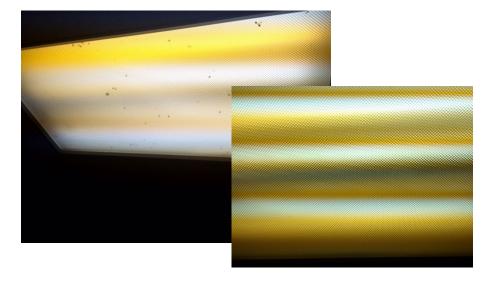


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## Shine

- The workplace should be clean and bright, a place where people enjoy working.
- If you can't get something clean, then paint it replace it, or cover it.
- Morale booster!!!







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## **Standardize**

- Establish norms and respect them
- Make it a habit
- Process standards
- Product standards





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#### **Sustain**

- Leadership is the key
- Everyone at all levels committed to sustaining
- Use auditing and checklist
- Quantify results What are the financial savings of your project?
- Display in the area (Quality Improvement Board)



Walk the "Gemba"

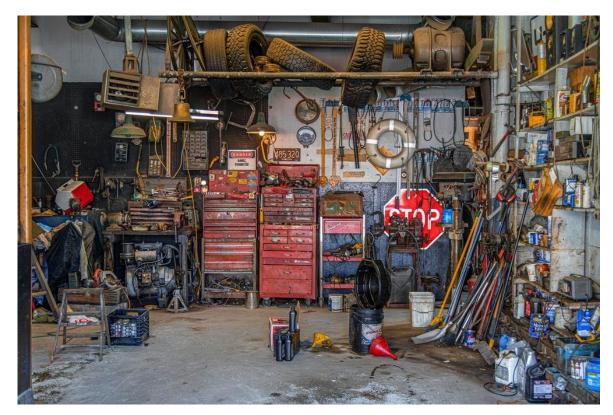




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## Where to use 5S

- Equipment and supply rooms
- Nurses Stations
- Patient Rooms
- Utility Rooms
- Offices
- Procedural Areas
- Dietary
- Home/Garage





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## **5S Implementation**

- Start with team
- Discuss benefits
- Train, then immediately do
- Agree on vision and standards
- Define the areas to 5S
- Define roles
- · Don't let participants walk away

- Get everyone involved
- Have leaders set
   expectations
- Follow up
- Keep it simple





#### Assignment #2

Pick	Pick one area of your unit/workspace or even an area at home like a pantry shelf to 5S
Include	Include your teammates or family members as this is crucial to sustainment of your project.
Use	Use the 5S checklist provided as a resource.
Take	Take pictures of your project before during and after.
Tally	Tally any savings from your project from elimination of waste.
Consider	Consider presenting your 5S project to leadership

Task	Role Responsible for	Identified area for	Status or Comments
	completing task	task completion	
Pick the area for the			
5S project			
Assign Team and			
Leadership Sponsor			
Team Training			
Discuss Benefits			
Review the 5S Steps			
Role Assignments			
Schedule date/time			
for the 5S			
Take team pictures			
and before pictures of			
the area			
Assemble supplies			
Bins			
Baskets			
Red Dots			
Designate the 4			
Staging areas – keep,			
throw away, recycle,			
we don't know			
Sort (Pictures too)			
Meet at 5S area and			
begin sorting into the			
4 categories - keep,			
throw away, recycle,			
we don't know			
Remove everything			
but "keep" items			
from the staging area.			
Set in Order (Pictures			
too)			
Label shelves, bins			
baskets			
2 Bin System			
Organize supplies			
based on VOC, VOB			
Shine (Pictures too)			
Clean, clean, clean			
0			
Standardize and			
Sustain			
Checklist or			
monitoring tool			



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## **Visual Controls**

- Gives status
- Directs location of things
- Indicates action
- Shows right from wrong





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## Julia Child – Visual Controls/5S

"You want to be able to find and stash everything easily ... unless you're one of those people who like to live in a mess."





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## **First In/First Out**

 First In, First Out (FIFO) is a method in which supplies purchased or acquired first are disposed of first.

• FIFO assumes that the remaining inventory consists of items purchased last.





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#### Questions







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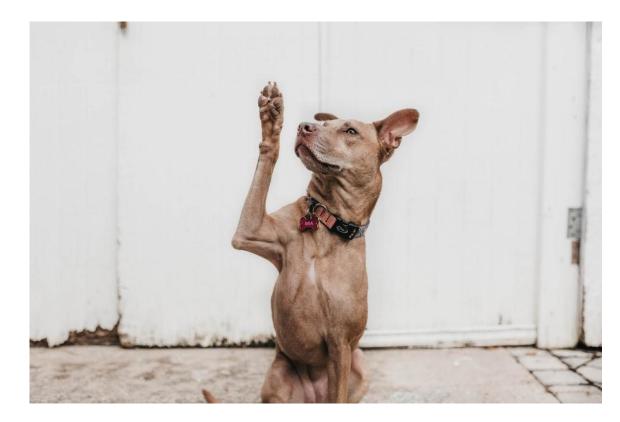
# **Evidence-Based Practice**

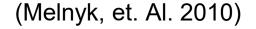


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## **Evidence Based Practice – 7 Step Method**

- Step Zero: Cultivate a spirit of inquiry
- Step 1: What is the question/problem?







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## **Evidence Based Practice – 7 Step Method**

- Step 2: Search for the best evidence
- "Acute care hospital" and "CLABSI" and "dressing change"
- Set Limits last 5 years, English etc.







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#### **Evidence Based Practice – 7 Step Method**

Step 3: Critically Appraise the evidence

- Are the results of the study valid?
- What are the results and are they important?
- Will the results help me care for my patients?



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#### CLABSI PRVENTION EVIDENCE TABLE

Source	Recommendations(s)/Themes	Outcome(s)	Implications	Supporting Evidence
Kramer, R. D., Rogers, M. A., Conte, M., Mann, J. Saint, S. & Chopra, V. (2017). Are antimicrobial peripherally inserted central catheters associated with reduction in central line associated bloodstream infection? A systematic review and meta-analysis. American Journal of Infection Control, 45(2), 108-114	Meta-analysis PICCs represent an advancement because they are easier and safer to insert, durable, and cost-effective compared with traditional central venous catheters (CVCs) The unit of analysis was PICC insertion. Relative risk (RR) was calculated to compare CLABSI risk in patients who received coated catheters (numerator) to those with noncoated catheters (denominator).	Found that antimicrobial PICCs were associated with a statistically significant reduction in the risk of CLABSI compared with noncoated devices Reduction in the rate of CLABSI was particularly evident in populations at high risk of infection. No significant differences were found between chlorhexidine- and minocycline- or rifampin coated devices. Data suggest that use of anti- microbial PICCs in patients at high risk of infection (eg. cancer or burn populations) may be effective.	for Practice Are we using antimicrobial PICCs?	(Additional References) Multiple articles cited in Meta-analysis.
Jones, L., Weber, M., Cape, K. & Elefritz, J. (2019). Peripheral IV Norepinephrine: Does it save Central Line Insertion and Is It Safe? Critical Care Medicine, 47, 622S.	Early resuscitation, leading to decreased infusion times, can minimize the need for a central line in select patients if norepinephrine can be administered safely through a peripheral intravenous catheter (PIV). A MICU protocol was developed with specific criteria for norepinephrine administration. Safety, central line placement, and	316 patients received norepinephrine including 92 infusions via a PIV. 34% did not require a central line. 3% had infiltrated PIV's, treated with phentolamine, without tissue injury. Compliance with the norepinephrine concentration was 99% and maximum dose compliance was 73%. 97% of infusions ran less than 24 hours.	Could we replicate at our facility?	Recent study, additional references once published.



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## **Evidence Based Practice – 7 Step Method**

Step 4: Integrate the evidence with clinical expertise and patient preferences and values

Consider the "Voice of the Customer"





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## Evidence Based Practice – 7 Step Method



Step 5: Evaluate the outcomes of the practice decisions or changes based on evidence.



Are the effects positive?



Are there unanticipated upstream or downstream effects?



Did our team achieve the same results as the EBP?

(Melnyk, et. Al. 2010)



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Step 6: Disseminate EBP results.

## Evidence Based Practice – 7 Step Method



Pilot the change on one unit then replicate on another unit.



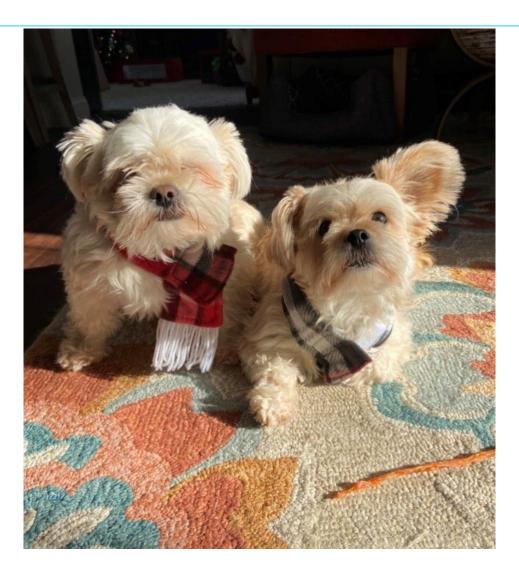
Step 7: Small test then replicate.



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#### **Toolkits - Agency for Healthcare Research and Quality**

- CRE <u>https://www.ahrq.gov/hai/patient-safety-resources/cre-</u> toolkit/index.html
- Communication <u>https://www.ahrq.gov/patient-</u> safety/capacity/candor/modules.html
- Community Acquired Pneumonia -<u>https://www.ahrq.gov/hai/tools/ambulatory-care/cap-toolkit/index.html</u>
- Comprehensive Unit-based Safety Program -<u>https://www.ahrq.gov/hai/cusp/index.html</u>
- Decrease C-Diff through AMS <u>https://www.ahrq.gov/hai/patient-safety-</u> resources/cdiff-toolkit/index.html
- Safe Surgery <u>https://www.ahrq.gov/hai/tools/surgery/index.html</u>



#### **Toolkits - Agency for Healthcare Research and Quality**

- Decrease Medicaid Readmissions <u>https://www.ahrq.gov/patient-safety/settings/hospital/resource/guide/index.html</u>
- RED Toolkit for Discharge <u>https://www.ahrq.gov/patient-</u> <u>safety/settings/hospital/red/toolkit/index.html</u>
- All Cause Harm Reduction (SHARE) <u>https://www.ahrq.gov/health-literacy/professional-training/shared-decision/index.html</u>
- Medication Safety <u>https://effectivehealthcare.ahrq.gov/products/medication-therapy-management-1/research</u>
- ED Throughput <u>https://www.ahrq.gov/research/findings/final-</u> reports/ptflow/index.html



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#### **Toolkits - Agency for Healthcare Research and Quality**

- Transitions of Care MATCH Program Toolkit https://www.ahrq.gov/patient-safety/resources/match/index.html
- HAPI Prevention https://www.ahrq.gov/patient-safety/settings/longulletterm-care/resource/ontime/pruprev/timeline.html
- Fall Prevention https://www.ahrq.gov/patient-• safety/settings/hospital/fall-prevention/toolkit/index.html
- Preventing Hospital-Associated Venous Thromboembolism -• https://www.ahrq.gov/patient-safety/resources/vtguide/index.html
- Prevention of CAUTI and CLABSI in ICUs ullethttps://www.ahrq.gov/hai/tools/clabsi-cauti-icu/index.html
- Engage patients to improve diagnostic safety -• https://www.ahrq.gov/patient-safety/resources/diagnosticsafety/toolkit.html Healthcentric Advisors 
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#### **Institute for Healthcare Improvement – QI Essentials**

- <u>http://www.ihi.org/resources/Pages/Tools/Quality-Improvement-</u> <u>Essentials-Toolkit.aspx</u>
- Membership to IHI is Free
- Tools for many useful Quality Improvement Tools: Cause and Effect Diagram, Driver Diagram, FMEA, Flowchart, Histogram, Pareto Chart, PDSA, Project Planning, Run Charts, and Control Charts



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#### **Centers for Disease Control and Prevention**

- Toolkits for the Prevention of Healthcare-Associated Infections
- Also pathogen specific: CRE, VRSA, Norovirus
- <u>https://www.cdc.gov/hai/prevent/prevention\_tools.html</u>
- Includes toolkits for Environmental Infection Prevention



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#### The Society for Healthcare Epidemiology of America (SHEA)

- <u>Compendium of Strategies to Prevent Healthcare-Associated Infections in</u> <u>Acute Care Hospitals</u>
- Strategies to Prevent Infections in Acute Care Hospitals
- Catheter-Associated Urinary Tract Infections (CAUTI)
- Surgical Site Infections (SSI)
- Clostridium difficile
- Methicillin-Resistant Staphylococcus aureus (MRSA)
- Central Line-Associated Bloodstream Infections (CLABSI)
- Ventilator-Associated Pneumonia (VAP)
- Hand Hygiene



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#### **Assignment #4 – Review 1 toolkit applicable to your project**

The CANDOR toolkit contains eight different modules, each containing PowerPoint slides with facilitator notes. Some modules also contain tools, resources, or videos.

<ul> <li>Implementation Guide for the CANDOR Process</li> </ul>		
<u>Acknowledgments</u>		
Module 1: An Overview of the CANDOR Process		
<ul> <li>Module 2: Obtaining Organizational Buy-in and Support</li> </ul>	"We realize mistakes happen, and we can forgive that; but you harm us again by not being	
<ul> <li>Module 3: Preparing for Implementation: Gap Analysis</li> </ul>	honest and transparent with uswe should be healing and learning together how to prevent this	
<ul> <li>Module 4: Event Reporting, Event Investigation and Analysis</li> </ul>	from happening to someone else."	
<ul> <li>Analysis Module 5: Response and Disclosure</li> </ul>		
Module 6: Care for the Caregiver	Carole Hemmelgarn, Patient Advocate	
<u>Module 7: Resolution</u>		
<ul> <li>Module 8: Organizational Learning and Sustainability</li> </ul>		

https://www.ahrq.gov/patient-• safety/capacity/candor/modules.html



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#### Questions

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- IHI Toolkits: <u>http://www.ihi.org/resources/Pages/Tools/Quality-Improvement-Essentials-</u>
   <u>Toolkit.aspx</u>
- CDC Toolkits: <a href="https://www.cdc.gov/hai/prevent/prevention\_tools.html">https://www.cdc.gov/hai/prevent/prevention\_tools.html</a>
- CDC Sepsis Toolkit: https://www.cdc.gov/sepsis/pdfs/Sepsis-Surveillance-Toolkit-Mar-2018\_508.pdf
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