Simply Outstanding Procedures

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Financial Disclosures – None

Learning Objectives

• Explain the purpose and benefits of well-written, dynamic SOPs
• Use recommended, best practice templates for developing Simply Outstanding Procedures
• Apply tips and strategies to continuously improve the effectiveness and efficiency of Standard Operating Procedures
“Simply Outstanding Procedures”

What Do They Look Like, Why Are They Needed, and How Do You Get There?

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NATIONAL MARROW DONOR PROGRAM
19 OCTOBER 2013
3:30-5:00PM

Introduction and Expectations

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LEARNING OBJECTIVES

1. Explain the purpose and benefits of well-written, dynamic SOPs
2. Use recommended, best practice templates for developing Simply Outstanding Procedures
3. Apply tips and strategies to continuously improve the effectiveness and efficiency of Standard Operating Procedures

Session Description


Simply Outstanding Procedures
Well-crafted Standard Operating Procedures (SOPs) utilize best practices to maximize safety for donors and patients. Utilizing a process mindset and prevention-mode methods, SOPs include measurement feedback for ongoing improvement, promote operational consistency, reduce variability and errors, and facilitate development and delivery of appropriate training. This interactive session uses small-group exercises for recognizing and addressing essential and missing ingredients of a well crafted, capable SOP.
Topics and Sequence

1. Rate Yourself on SOP Expertise
2. Mom’s Fruit Cake Exercise
3. Consequences of Poor SOPs
4. Analysis – Good and Not So Good Examples
5. Review of table exercises on Good/Bad SOPs
6. Consequences of Poor SOPs
7. PDCA and Measurement Analysis make Simply Outstanding Procedures
8. SOP on SOPs
9. Template for Simply Outstanding Procedures
10. Conclusions and Next Steps

Rate Yourself On SOP Expertise

Rate yourself on SOP expertise
1 = I can’t spell SOP
5 = I can teach it

I can’t spell SOP  I can teach it
1  2  3  4  5
Mom’s Fruit Cake

- Don’t look yet at the hardcopy of the presentation
Mom’s Fruit Cake Exercise -- We live in a world of SOPs

A holiday tradition... memories of baking treats with grandma, just before the holidays...

Mom’s Fruit Cake Exercise

Individually, look at the Mom’s Cake Exercise handout

   Note any troublesome, confusing, unclear, etc. parts to the recipe

   Yes, you can take it home to make the recipe!!
Clear to me! Any questions?

Little hot water...
APPLE SAUCE CAKE

Cream 1 c sugar & ½ c butter. Dissolve 1 tsp soda in a little hot water and stir into 1 c sour apple sauce, letting it foam over into mixing bowl. (I just use the canned apple sauce - doesn't have to be SOUR!!) Add 1-½ c flour sifted with 1 tsp cinnamon, ½ tsp cloves, ½ tsp nutmeg. Mix thoroughly and then add ½ c raisins, some dates, candied fruit and walnuts (Leave out the raisins and just add the dates and candied fruits and nuts until it looks pretty thick with fruit!!! Bake in loaf in mod oven about 45 minutes, or more. Test doneness with toothpick, etc.

Must be sour

Never Mind!!
APPLE SAUCE CAKE

Cream 1 c sugar & ½ c butter. Dissolve 1 tsp soda in a little hot water and stir into 1 c sour apple sauce, letting it foam over into mixing bowl. (I just use the canned apple sauce - doesn't have to be SOUR!!) Add 1-3/4 c flour sifted with 1 tsp cinnamon, ½ tsp cloves, ½ tsp nutmeg. Mix thoroughly and then add ½ c raisins.

some dates, candied fruit and walnuts (Leave out the raisins and just add the dates and candied fruits and nuts until it looks pretty thick with fruit!!)

Bake in loaf in mod oven about 45 minutes, or more. Test doneness with toothpick, etc.
APPLE SAUCE CAKE

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APPLE SAUCE CAKE

Cream 1 c sugar & 1/2 c butter. Dissolve 1 tsp soda in a little hot water and stir into 1 c sour apple sauce, letting it foam over into mixing bowl. (I just use the canned apple sauce - doesn't have to be SOUR!!) Add 1-3/4 c flour sifted with 1 tsp cinnamon, 1/2 tsp cloves, 1/2 tsp nutmeg. Mix thoroughly and then add 1/2 c raisins, some dates, candied fruit and walnuts (Leave out the raisins and just add the dates and candied fruits and nuts until it looks pretty thick with fruit!!!). Bake in loaf in mod oven about 45 minutes, or more. Test doneness with toothpick, etc.
The toothpick test.
Insert a toothpick into the center of the cake.
1. If it comes out clean, or with only a few moist crumbs attached to it, the cake is done.
2. If the toothpick comes out with wet batter, keep baking it. Go back to Step 1.

Rev 1

Bake 1 hr - 1 hr. 15 min.
Clear to me! Any questions?

Consequences of Poor SOPs

Key issues of poor SOPs

1. Variability and errors
2. Operational inconsistency
3. Incomplete training
4. Absence of measurement feedback to enable process and procedure improvements
Variability and Errors

Johns Hopkins critical care specialist, Dr. Peter Pronovost, plotted out five steps to avoid infections when putting in a central line:

1. Doctors wash their hands with soap
2. Clean the patient’s skin with chlorohexidine antiseptic
3. Put sterile drapes over the entire patient
4. Wear a mask, hat, sterile gown, and gloves
5. Put a sterile dressing over the insertion site once the line is in

Nurses authorized to stop doctors if they saw them skipping a step

*After one year, the ten-day infection rate went from 11% to 0%*

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Operational Inconsistency

... to spread responsibility and the power to question [authority], we had the circulating nurse call the start...

... I saw a gallbladder operation ... in Jordan ... in which the surgeon inadvertently contaminated his glove while adjusting the operating lights. He hadn’t noticed, but the nurse had.

“You have to change your glove” the nurse told him in Arabic.

“It’s fine” the surgeon said.

“No, it’s not” the nurse said. “Don’t be stupid.” Then she made him change her glove.
Incomplete Training

Dr. Pronovost ... Tested some more checklists in his Johns Hopkins ICU.

Checklist on mechanical ventilation...

proportion of patients not receiving the recommended care dropped from 70% to 4%,
occurrence of pneumonia fell 25%,
21 fewer patients died than in the previous year.

Absence of measurement feedback to enable process and procedure improvements

Hospitals had to be willing to allow observers to measure their actual rates of complications, deaths and system failures ... before and after adopting the checklist. Most... have no idea of their current rates. Two-minute, 19-step surgery checklist...

Rates of major complications down 36% Deaths fell 47% Infections fell almost 50%

Patients returned to surgery from bleeding of technical issues down 25%

Of 4000 patients, in the group of eight hospitals
  • 435 complications expected, 277 actual
  • 27 fewer deaths than expected
Analysis –
Good and Not So Good Examples

Each person individually read the two procedures in the handouts:
1. Using an Interpreter for Communicating with the Donor
2. Managing Mail Pieces

Note which is the better of the two, and why.
Share why you think one SOP is good. And share why you think the other SOP is not so good.

Why one SOP was judged good

Tables report selected “goods” they found
Why one SOP was Judged Not So Good

Tables report selected “not so goods” they found

Recognizing and addressing essential and missing ingredients of a well-crafted, capable SOP

Considering the SOPs you reviewed... what examples do you have that contribute to these unintended consequences

- Variability and errors
- Operational inconsistency
- Unintended Consequences
- Incomplete training
- Absence of measurement feedback to enable process and procedure improvements
Foundation model for creating and maintaining Simply Outstanding Procedures

Act

Plan

Check

Do
A procedure for Developing and Maintaining Simply Outstanding Procedures

**SOP for Creating, Maintaining, and Improving Simply Outstanding Procedures**

1. Define SOP purpose in one phrase – Why does the SOP exist and when is it supposed to be invoked?
2. Watch the expert – follow as the expert does the task well. Be attentive to what can go wrong.
3. Visualize it – record the visualizing steps, note the sequence, the important/different steps, and the second/third/last entry steps. Create a Value Stream Map (VSM) of data flow and transformation steps.
5. Write the SOP – formatting.
6. Verify that new experiment does the task safely and effectively – inspect watch for expected output and makes sure all steps are connected and correctly. Repeat if needed.
7. Write down the SOP, tool around FTDA and measures.
8. Analyze assessment results, start next FTDA as needed – utilizing measured tools to improve the use and effectiveness of SOPs.

**SOP for SOPs → SOP Template**

**SOP for SOPs**

**Step 1 of SOP for SOPs:** Define SOP purpose in one phrase – Why does the SOP exist and when is it supposed to be invoked?

**STANDARD OPERATING PROCEDURE**

A: OBJECTIVE or SCOPE? (Why do we need this procedure?)

Write objective (or scope) for the SOP that answers: 1) Which specific operations or tasks are covered, 2) Which are not covered, 3) Who is the SOP written for?
**SOP for SOPs → SOP Template**

**SOP for SOPs**

**Step 2:** Watch the expert – follow as the expert does the task well. Be attentive to what can go wrong.

**Step 3**

Visualize it – record the transforming steps, note the sequence, the inspection/calibration steps, and the records/database entry steps. Create a Value Stream Map (VSM) of data flow and transformation steps.

**SOP for SOPs Template**

**STEP 1: Template Description**

**STANDARD OPERATING PROTOCOL**

1. **GENERAL PROCEDURE:**
   - Lay out steps in the procedure using the following guidance to determine the most appropriate style or combination of styles that best match the nature of the SOP.
     - **Specific order in which activities are done**
     - **Timing, sequences, and times allowed**
     - **Materials or tools used, and how they are used**
     - **Safety or Health considerations – place help and safety warnings prominently in the SOP**
     - **References to other, associated SOPs**
     - **Define terms and concepts, when needed**

2. **MOST COMMON ERRORS** (Does the procedure eliminate known causes of errors? If so, what are they? What metrics tell you that the procedure was correctly and fully completed?) Identify the most common errors that occur or have occurred in the execution of the SOP (this is a list to be kept current through the Revision History included in the SOP).

3. **WORKSITE REMINDER VISUAL AIDS:**

   - **Tools to help illustrate**
     - a) • Checklists – for short, simple, straightforward tasks.
     - b) • Hierarchical – tasks that require additional detail or sub-steps within each primary step
     - c) • Linear Flow Chart – activities must be done in a specific order and where an easy-to-follow reminder at the job site is useful
     - d) • Annotated Pictures – works well for people who cannot read or where a language barrier exists
     - e) • Branching flowchart – those with a number of decisions that affect subsequent steps

   - **Operational method sheets to assist in SOP execution. Augments but does not replace full SOP steps.**
SOP for SOPs → SOP Template

**SOP for SOPs**

**Step 4** –
Put that VSM into words; step-by-step instructions.

**STANDARD OPERATING PROCEDURE**

1. GENERAL PROCEDURE:
   Lay out steps in the procedure using the following guidance to determine the most appropriate style or combination of styles that best match the nature of the SOP.
   1. Specific order in which activities are done
   2. Timing, sequences, and times allowed
   3. Materials or tools used, and how they are used
   4. Safety or Health considerations – place help and safety warnings prominently in the SOP
   5. References to other, associated SOPs
   6. Define terms and concepts, when needed

**SOP for SOPs → SOP Template**

**Step 5** – Write the SOP. Parsimony.

**WRITE THE STANDARD OPERATING PROCEDURE**

Use active voice, first person, action words.

Enough to cover the subject but not redundant or complicated.

Test what you wrote. Do readers understand it unambiguously?
SOP for SOPs → SOP Template

**SOP for SOPs**

**Step 6 –**
Verify that non-experts can do the tasks safely and effectively — inspector watches a novice follow and makes notes of issues vs. when/what expert did. Were all things done correctly and completely? Iterate if needed.

**F: METRICS/KEY MEASURES** (What are key measures of success for the procedure that need to be recorded/tracked?)

Identify any key metrics that serve as measurement of successful execution of the SOP.

**G: MOST COMMON ERRORS** (Does the procedure eliminate known causes of errors? If so, what are they? What metrics tell you that the procedure was correctly and fully completed?)

Identify the most common errors that occur or have occurred in the execution of the SOP (this is a list to be kept current through the Revision History included in the SOP.)

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**SOP for SOPs**

**Step 7 –**
World Class SOP is built around PDCA and measures.

**Step 8 –**
Analyze measurement results, start next PDCA as needed — utilizing measurement tools to improve the use and effectiveness of SOPs.

**A: OBJECTIVE or SCOPE?** (Why do we need this procedure?)

**F: METRICS/KEY MEASURES** (What are key measures of success for the procedure that need to be recorded/tracked?)

Identify any key metrics that serve as measurement of successful execution of the SOP.

**G: MOST COMMON ERRORS** (Does the procedure eliminate known causes of errors? If so, what are they? What metrics tell you that the procedure was correctly and fully completed?)

Identify the most common errors that occur or have occurred in the execution of the SOP (this is a list to be kept current through the Revision History included in the SOP.)
Conclusions and Next Steps

Key Learning Points

- Make it personal
- What to do next to create an SOP
- What to do next to incorporate metrics and PDCA to turn standard SOPs into Simply Outstanding Procedures
- What to do to reinforce PDCA habits