

SCAMPER TECHNIQUE¹

John W. Moran, PhD.², Sonja Armbruster³, and Annie Vosel, BSN, RN⁴

April 2014

Description: The **SCAMPER** Technique is a process improvement tool to assist teams in improving existing processes or creating new ones. The SCAMPER technique is an idea generator and should be used in conjunction with the Five S's Technique⁵ and the 8 Lean Wastes Checklist. This will allow the team to better deliver what the customer desires. Using the three techniques together is also useful when developing a new process.

The SCAMPER checklist helps a quality improvement (QI) team increase their creativity and think outside the box to generate many ideas for improvement. Because this technique is an idea generator, many of the ideas may turn out to be impractical or too costly. While brainstorming the ideas, just write them down without judging them; prioritization and elimination will come later in the process.

Use it after a QI team has developed the flow chart of the existing process, understands the baseline measures, and has developed root causes of the problems or bottlenecks in the process along with the Five S's.

The letters in the acronym **SCAMPER** stand for:

- S Substitute
- C Combine
- A Adapt
- M Modify
- P Put to another use
- E Eliminate
- R Reverse

¹ Thinkertoys: A Handbook of Creative-Thinking Techniques. M. Michalko, Ten Speed Press, 2006.

² John W. Moran, Ph.D. is a Senior Quality Advisor to the Public Health Foundation and a Senior Fellow at the University of Minnesota, School of Public Health in the Division of Health Policy and Management. President of the Advisory Board of Choose To Be Healthy Coalition of the Healthy Maine Partnership for York County, Maine. He is a faculty member of the CDC/IHI Antibiotic Stewardship project 2011-2012, a member of PHAB's Evaluation and Quality Improvement Committee, and Adjunct Professor in the Arizona State University College of Health Solutions' School for the Science of Health.

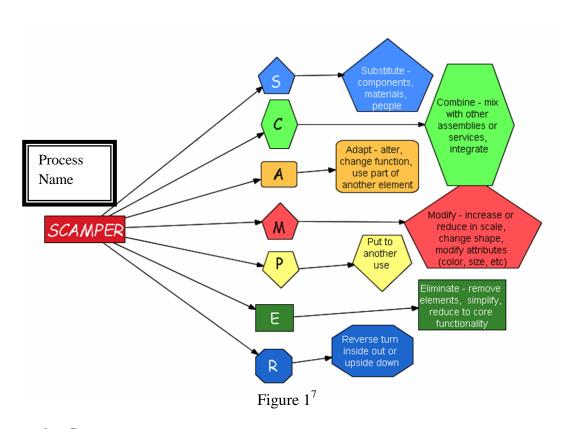
³ Sonja Armbruster, MA, Public Health Initiatives Coordinator for Wichita State University's Center for Community Support and Research and consultant for the Public Health Foundation; Co-Convener of the Visioneering Wichita Health Alliance 2009 – Present, Member and past chair of NACCHO's MAPP Workgroup, PHAB Site Visitor, and Adjunct Faculty for Wichita State University Public Health Sciences Program and the University of Kansas School of Medicine, Master of Public Health Program.

⁴ Annie Vosel, BSN, RN is the Title X Family Planning Director and the Training Coordinator for the Alabama Department of Public Health; the 1115 Medicaid Family Planning Waiver Manager. Developed a statewide clinical efficiency project for county health department Family Planning programs.

⁵ Five S's, *Public Health Quality Improvement Encyclopedia*, J. Moran and G. Duffy, Public Health Foundation, Washington, DC, 2012, pp. 33-34.

⁶ Lean Wastes, *Public Health Quality Improvement Encyclopedia*, J. Moran and G. Duffy, Public Health Foundation, Washington, DC, 2012, pp. 67-68.

Figure 1 depicts the SCAMPER Technique that can be used to help the QI team see their ideas as they unfold. Seeing the ideas helps generate more options and form combinations. With the SCAMPER Technique we are seeking a *quantity* of ideas. The *quality* of ideas can be judged later in the improvement process.



Construction Steps:

The team can use a worksheet to improve creativity using the SCAMPER Technique and record ideas for improvement. The first column in the worksheet details the SCAMPER acronym, the second column details some key words to stimulate discussion and idea generation, the third column is for recording the ideas generated, the fourth column is for listing the ideas selected for possible usage through a prioritization process, and the last column indicates how the ideas might be used in the process improvement. The example below was provided by the Alabama Department of Public Health.

Next step: The SCAMPER Technique is an idea generator that should be used in conjunction with the Five S's Technique and the 8 Lean Wastes Checklist to help a QI team find the optimum process improvements. This will allow the team to deliver what the customer desires more effectively. Using these three techniques together is also useful when developing a new process, helping the team avoid building problems into the process that will have to be fixed later. This

⁷ http://goo.gl/9LZLs6, accessed 2/5/2014.

⁸ Prioritization Matrix, *Public Health Quality Improvement Encyclopedia*, J. Moran and G. Duffy, Public Health Foundation, 2012, pp. 93-94.

combination of techniques is a way to "Foolproof" a process, ensuring that every step adds value for the customer.

Related Tools: Control and Influence Matrix, Five S's, Impact Effort Plot, Lean Wastes, Prioritization Matrix

Draft AIM Statement: An opportunity exists to increase clinic efficiency and patient satisfaction by decreasing clinic wait times.

SCAMPER	Some Key Words To Help Generate Ideas	Record Ideas Generated	List Prioritized Ideas Selected	How Will They Be Incorporated Into The Improvement?
Substitute	Components, ingredients, procedures, exchange, replace, materials, people, location, policy, procedures	 Change staff schedules, stagger start times & lunches Hire more efficient staff Change clinic flow 	Stagger start times & lunches	Clerk and RN Arrive at 7:30; client in room at 8 for NP
Combine	Combine, mix, merge, integrate, blend, comingle	Integrate scheduling across program types		
Adapt	Alter, change, copy, borrow, adopt, similar, incorporate	 Change clinic start times Stagger start times by program Client reminder letters/calls 	Client reminder calls	Use Check-in clerks to make reminder calls after last patient checked-in
Modify	Augment, magnify/minify, change shape/color/size, modify attributes	 Offer prize drawings for clients on time for appointments Add team huddles for team building and cycle time reviews 	Add team huddles	Improve clinical performance by sharing performance goals with staff
Put To Other Use	Recycle, use elsewhere, rearrange, replace, exchange, reposition	 Alter pill-pick up appointment times vs. full FP visit Maximize staff utilization Change walk-in schedule time Data entry responsibilities 	Maximize staff utilization	Schedule fast track appt. for first appt. of day. Change scheduling so deferrals are completed prior to the NP appointment so there are no true initial visits on family planning days.
Eliminate	Remove, eradicate, simplify, narrow, non- essential, disregard	 Remove program-blocked schedules by visit type Reduce information gathered on repeat client health history forms Standardize clinic supplies 	Design all clinic room supplies exactly the same way (simplify)	Through a team planning process, design a supply template for use by all staff.
Reverse	Rearrange, opposite, turn the other way around or up or inside out, exchange, manipulate	 Require late patients to reschedule rather than be worked into the schedule. Stop over booking morning appts. Stop under booking afternoon appts. 	Scheduling	Train schedulers to assure 50% appt. in am/50%pm. Increase supervisor accountability to monitor appointment template.