

Speaking Techniques and Non-Technical Info.

[Agency For Healthcare Research and Equity](#)

The SHARE Approach—Using the Teach-Back Technique: A Reference Guide for Health Care Providers

Workshop Curriculum: Tool 6

Cover Note: The SHARE Approach is a 1-day training program developed by the Agency for Healthcare Research and Quality (AHRQ) to help health care professionals work with patients to make the best possible health care decisions. It supports shared decisionmaking through the use of patient-centered outcomes research (PCOR).

Teach-back—a useful technique

Every clinician wants to know the most effective way to communicate with patients and their families. It's the first step to helping someone with a health problem. With the teach-back technique, effective clinician-patient communication is assured because patients are asked to "teach back" what they have learned during their visit. Patients use their own words to explain what they need to know about their health, or what they need to do to get better.

Below are some other advantages of the technique:

Helps your patients remember and understand more information^{1,2}

Raises patient satisfaction and helps patients feel more relaxed

Helps you gain your patients' trust

Is not time consuming to implement and can take as little as 1 to 2 minutes³

How to use the teach-back technique with your patients

Check off the strategies you will try.

What To Say⁴

___ Explain things clearly using plain language and avoid using medical jargon and vague directions.

___ Make sure your patients know your goal is to check how well you explained the health information—not to test their knowledge.

___ Encourage your patients to use their own words, rather than copying you or others on your clinical team.

___ Ask open-ended questions that start with "what" or "how" and avoid questions that result in "yes" or "no" answers.

___ When appropriate, ask your patients to show you how to do something, such as how to check their blood pressure or use their inhaler.

How To Say It

___ Speak slowly and make eye contact.

- ___ Allow your voice and facial expressions to show genuine interest.
- ___ Use relaxed body language.

When To Use Teach-Back

- ___ Use teach-back whenever you explain an important concept—such as treatment options, participation in a clinical trial, weighing benefits and risk, or adherence to a treatment plan.
- ___ Check for comprehension after main points and repeat these points throughout the visit.

Teach-back questions for shared decisionmaking

Try these examples with your patients

"We talked about two treatment options today: watchful waiting and starting radiation in a few weeks. I want to make sure I explained each option clearly. Would you please tell me how you would explain watchful waiting to your family member?"

"I want to make sure I was clear about the pros and cons of taking this medicine. Could you tell me about the possible side effects of the medicine and how it could lower your chance of a heart attack?"

"I want to check how well I explained the treatment options, benefits, and possible harms outlined in this decision aid on osteoporosis. Please tell me, in your own words, about the options we discussed that could help lower your chance of breaking a bone."

Help your patients to understand

Teach-back allows you to see how well you explained or taught health information to your patients. Patients do not mind being asked about their understanding—according to a patient preferences and assessment study.⁵

If a patient does not understand

At times, teach-back may reveal that a patient does not understand what they need to know, or what they need to do.

Steps To Take

Say, "I must not have done a good job explaining. Let me try again."

Explain the health information a second time using a different approach. Create a simple drawing, show a model, or demonstrate the behavior (such as showing how to empty a Foley catheter urine bag).

Use teach-back again to check for comprehension.

Promote a teach-back environment

Besides asking questions, there are other ways to promote teach-back. You can create an atmosphere that invites your patients to take the lead in using it.

Try These Tips

Give your patients the time and opportunity to talk to you.

Make sure all the staff in your office are trained on the technique and are using teach-back correctly.

Post signs that explain teach-back and encourage your patients to use it.

Using teach-back with decision aids

Teach-back is especially important to use with decision aids, such as written materials, videos, and interactive tools. These aids help your patients learn about and evaluate their options so they can make informed choices. After you offer decision aids to your patients, be sure to follow up at the next visit. Use the teach-back technique to make sure your patients used and understood the decision aids.

Start slowly

Remember, adopting new behaviors can take a little time to master. Be patient with yourself. At first, start out slowly with one or two of your patients a day. Soon you will find teach-back is second nature for you.

Track your progress

It's a good idea to document your use of the teach-back technique to know how well you are using it.⁴ For a tracking log, visit page 159 in the Health Literacy Universal Precautions Toolkit (Pub. No. 10-0046-EF), from the Agency for Healthcare Research and Quality (AHRQ), at <http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthliteracytoolkit.pdf> (339 KB).

10 Elements of Competence for Using Teach-back Effectively

1. Use a caring tone of voice and attitude.
2. Display comfortable body language and make eye contact.
3. Use plain language.
4. Ask the patient to explain back, using their own words.
5. Use non-shaming, open-ended questions.
6. Avoid asking questions that can be answered with a simple yes or no.
7. Emphasize that the responsibility to explain clearly is on you, the provider.
8. If the patient is not able to teach back correctly, explain again and re-check.
9. Use reader-friendly print materials to support learning.
10. Document use of and patient response to teach-back.

What is Teach-back?

I A way to make sure you—the health care provider—explained information clearly. It is not a test or quiz of patients.

I Asking a patient (or family member) to explain in their own words what they need to know or do, in a caring way.

I A way to check for understanding and, if needed, re-explain and check again.

I A research-based health literacy intervention that improves patient-provider communication and patient health outcomes¹.

The Teach-Back Toolkit A Guide to the Use and Implementation of the Teach-Back Method

Talevski J, Beauchamp A, Wong Shee A, Rasmussen B, Hilbers J. September 2021

2 What is Teach-back?

Teach-back is a simple and effective way of checking that you have clearly explained information to your patients by confirming that they understand it. Teach-back involves asking patients to explain back what you have just told them in their own words. Any misunderstandings are then clarified by the health provider, and patient understanding is checked again. FACT: Studies have shown that up to 80% of medical information patients are given is forgotten immediately, and almost half of the information retained is incorrect^{1,2}

Why use teach-back?

Use of teach-back enhances communication between patients and healthcare providers, helping ensure that information is clearly understood. Teach-back can improve learning-related outcomes (e.g. self-care practice), patient satisfaction, and health outcomes (e.g. hospital re-admissions)³⁻⁵

Teach-back is endorsed as a health literacy communication approach by the Australian Commission on Safety and Quality in Health Care (ACSQHC), the American Heart Association and the American Diabetes Association

How to use teach-back

The goal of teach-back is to ensure that the patient understands what you have just communicated to them. The steps of teach-back are:

1. This process can be repeated up to three times - if the patient still misunderstands at this point, it is time to try other approaches. See <http://teachback.org> for more information.
2. Step 1 Use plain language to explain information.
3. Step 2 Ask the patient to explain what you just told them in their own words.
4. Step 3 Re-explain anything that is misunderstood.
5. Step 4 Repeat steps 2 & 3 until the information is understood.

3 Using teach-back in practice

Teach-back should be used in any situation where it is important that the information given by a health worker is understood by a patient or their carer.

Outpatient clinic

Emergency department

Where you can use teach-back

Hospital

Community health centre

How teach-back can be delivered

One-on-One Telephone In a group session

Who can use teach-back

Any health worker who provides patients with information

In case I've missed something, could you just go through what you need to do?

Example phrases for using teach-back

Demonstrating how to do something

Techniques for using teach-back

Using written or visual materials

Verbal information

Your inhaler is important for your health. Can you show me how you would use it at home? Just so I'm sure I explained your medication correctly, can you tell me when and how much you are going to take?

4 Making teach-back part of routine practice

Implementing teach-back throughout a healthcare service may be a significant workflow change, therefore simply educating staff on how to use teach-back is not enough to ensure it is integrated into routine practice successfully. Multiple strategies are needed to effect ongoing change and support continued use of a new intervention⁶. These strategies will depend on the type of practice setting, but may include: See <http://teachback.org> for more information

Training and education for staff

Techniques include development and distribution of education pamphlets; use of online education modules; and face-to-face training seminars with or without role-playing scenarios.

Building a culture of teach-back

This may involve designating "Teach-Back Champions" to guide and motivate staff to use teach-back; or holding regular team meetings to gain feedback about using teach-back.

Prompts and reminders

Developing clinical reminders for use of teach-back can involve hanging posters; leaving notes on whiteboards in patient rooms; or via electronic prompting (e.g. reminder emails or in patient management systems).

Using evaluation strategies

Developing a quality monitoring system to ensure

teach-back is implemented correctly; introducing an audit system for teach-back; or providing progress reports. Tips for integrating teach-back into practice Include teach-back in standard orientation programs for new staff Start by using teach-back with topics that are relatively 'contained' Allow team members to share experiences using teach-back at team meetings Let patients know teach-back is available and encourage them to use it. 5 Healthcare workers' experiences of using teach-back "It might have taken more time on that initial phone call, but you definitely wouldn't have had the frequent phone calls again and again. Now I feel they have a better understanding, so I don't have those return phone calls" - Occupational Therapist "People benefit from us trying to check in with them and seeing their understanding" - Social Worker "I probably do it with everyone now because for me it highlights to not assume knowledge. Don't assume that they understand" - Physiotherapist "There's that 'now I get it' moment that happens, but there's also a level of equality that comes with it. Clients feel they are with you on the journey rather than you teaching them" - Team Leader Examples of using teach-back³ Management of chronic health conditions including medication use, demonstration of inhaler techniques and self-care practices Explaining discharge information for post-surgical procedures Self-management strategies for post-partum depression Understanding medical diagnoses and follow-up in the Emergency Department 6 Training resources for teach-back The teachback.org online learning module will provide you with information and skills to use the teach-back method. Videos and other learning tools are used to show how teach-back is used in different healthcare settings. The module is available at <http://teachback.org/learn-about-teach-back/> The Always Use Teach-Back! interactive learning module describes teach-back and demonstrates its effectiveness as a health literacy intervention to improve patient-provider communication. It includes video and interactive self-assessment questions to enhance, confirm, and reinforce your ability to use teach-back and integrate it into your clinical practice. The module is available at www.teachbacktraining.org/interactive-teach-back-learning-module Sponsored by the Agency for Healthcare Research and Quality (AHRQ), this learning module is designed to inform clinicians about the teach-back method and provide effective strategies to implement teach-back. The module is available online via the AHRQ website at www.ahrq.gov/patientsafety/reports/engage/interventions/teachback-mod.html The Centre for Culture, Ethnicity & Health provides health literacy training modules for service providers to help them deliver services that are easier to understand and empower their clients to make better decisions. Health literacy resources, including teach-back information, is available at www.ceh.org.au/resource-hub/category/health-literacy/# 7 How to measure if teach-back is effective Although teach-back has been found to be effective across a wide range of settings, populations and outcome measures³ ; your organisation may still wish to perform their own evaluation. An evaluation may help you learn as much as possible about how best to implement teachback; collect information about the conditions in which teach-back worked well and where it didn't; and whether teach-back sufficiently improved outcomes to justify the effort. It may also be valuable to collect some information about the acceptability of teach-back with different kinds of patients. Some examples of how outcomes can be measured are given in the following table:

Patient Outcomes	Outcome Measures (examples only)
Knowledge	Skills & Attitudes
Disease Knowledge	See ePROVIDE for questionnaires: https://eprovide.mapi-trust.org/
Recall of information	Self-made questionnaire Patient Satisfaction Local patient experience surveys or:

www.safetyandquality.gov.au/our-work/indicatorsmeasurement-and-reporting Happiness e.g. Oxford Happiness Survey see: <http://happiness-survey.com/> Health Literacy See: <https://healthliteracy.bu.edu/> Behaviour Change Self-Management See: www.selfmanagementresource.com/resources Medication Adherence Prescription history or patient self-report Inhaler Technique e.g. Inhaler Technique Checklist, see: www.nationalasthma.org.au/living-with-asthma/resources Diet 24-hour food diary, or see: <https://inddex.nutrition.tufts.edu/data4diets/datasource/food-frequency-questionnaires-ffq> Objective Health Outcomes Quality of Life e.g. EQ-5D, see: <https://euroqol.org/eq-5d-instruments/> or www.aqol.com.au/ Hospital readmissions Audit of hospital admission records Depression/ Anxiety e.g. PHQ-9; HADS, see: www.integration.samhsa.gov/clinical-practice/screeningtools Clinical measures e.g. changes in clinical indicators such as HbA1c, blood pressure, or waist circumference 8 Things to remember 1. Teach-back is NOT a test: Teach-back is a technique to determine a patient's understanding, not a test of their knowledge. 2. Plan your approach: Think about how you will ask your patients to teach-back the information you have just explained to them. 3. Encourage patients to use their own words: If patients parrot your words back to you, they may not have understood the information correctly. 4. Practice makes perfect: It will take some time, but once it is part of your routine, teach-back can be done without awkwardness and does not lengthen a visit. 5. Take advantage of educational handouts: Use handouts along with teach-back and write down key information to help patients remember instructions at home. 6. Share teach-back stories: Ask one person at each staff meeting to share a teachback story. 7. Start with one patient a day: Try the teach-back method with one patient a day and reflect on what worked/didn't work. Try to increase to two patients a day and so-on. References 1. Richard C et al. Communication and patient participation influencing patient recall of treatment discussions. Health Expectations. 2017;20(4):760-70 2. Kessels P. Patients memory for medical information. J Soc Med. 2003;96(5):219-22 3. Talevski J et al. Teach-back: A systematic review of implementation and impacts. PlosOne. 2020 4. Ha Dinh TT et al. The effectiveness of the teach-back method on adherence and self-management in health education for people with chronic disease: a systematic review. JBI Database of Systematic Reviews and Implementation Reports. 2016;14(1):210-47 5. Dantic DE. A critical review of the effectiveness of 'teach-back' technique in teaching COPD patients. 2018 6. Sullivan G, et al.. Translating clinical training into practice in complex mental health systems: Toward opening the 'Black Box' of implementation. Implement Sci. 2008;3. This toolkit was funded in part by the Nurses Board of Victoria Legacy Ltd. (NBVLL). The views expressed do not represent those of the NBVLL.

[Plain Language Materials & Resources](#)

Checklist

Plain language makes it easier for everyone to understand and use health information. Although plain language is a familiar idea, many organizations don't use it as often as they should. The Plain Writing Act of 2010

requires federal agencies to train staff to use plain language when they communicate with the public.

Plain Language Resources

Keep the reader in mind as you make decisions about organizing and formatting your health information. Select the most appropriate words for the intended audience.

Everyday Words for Public Health Communication

Use Everyday Words for Public Health Communication to reduce public health jargon. This tool lists terms that authors frequently use in public health materials and the terms' common, everyday alternatives. The recommended alternatives come from CDC's Health Literacy Council and other agency communicators. You can also see real-life examples of complex sentences and how our communicators revised them using common, everyday words.

The Federal Plain Language Guidelines

The Plain Language Action and Information Network (PLAIN) is a community of federal employees dedicated to the idea that citizens deserve clear communication from government. PLAIN developed and continues to revise the federal plain language guidelines to provide updated advice on clear communication.

Guidelines for Effective Writing

Centers for Medicare & Medicaid Services (CMS)

CMS provides 8 categories of tips for effective writing.

Plain Language at NIH

National Institutes of Health

NIH has established the Clear Communication initiative that focuses on achieving health literacy objectives. Their page on plain language has information about training and links to plain language resources.

Top of Page

Plain Language Examples

The following materials demonstrate use of plain language principles.

Stay Safe from COVID-19 won the 2022 ClearMark Award for Shorter Brochures. It was also part of the materials that won the Grand ClearMark Award.

COVID-19 Materials for People with Intellectual and Developmental Disabilities and Care Providers. These materials won the 2022 Grand ClearMark Award from the Center for Plain Language

.

Still Going Strong, a campaign to raise awareness about preventable injuries among older adults, won the 2022 ClearMark Award for Posters, Charts, and Fliers.

Dengue Vaccine Poster

Plain Language Checklist

Plain language is communication your audience understands the first time they read it or hear it. Use this checklist to make your materials easier for your audience to understand:

Organize to serve the audience

Know your audience and purpose before you begin.

Put the most important message first.

Present other information in order of importance to the audience.

Break text into logical chunks and use headings.
Choose words carefully
Write in the active voice.
Choose words and numbers your audience knows
Strive for an average of 20 words per sentence. Limit each sentence to 1 idea.
Limit paragraphs to 1 topic and 5 sentences.
Use “you” and other pronouns.
Make information easy to find
Use headings and text boxes.
Delete unnecessary words, sentences, and paragraphs.
Create lists and tables, if appropriate.
Top of Page

Last Reviewed: September 20, 2023
Source: Centers for Disease Control and Prevention
Facebook

[4 Best Practices for Patient Postoperative Care Instructions](#)

1. Give your patients the WHY

To avoid complications that could result in rework, let patients know exactly why they’re supposed to abstain from certain actions or habits. For example, drinking alcohol and smoking are terrible ideas after an extraction because they may result in the loss of the clot needed for healing. You may already be communicating this to patients. But the bigger “why” here (for the patient) is if they don’t follow your instruction and ditch these habits for the prescribed time, the result is going to be pain – a lot of it. And if they think they’re in pain now, wait till they end up with dry socket. Tell them that.

2. Set proper expectations

“Increasing the quantity of postoperative preparatory information significantly increases pain relief.” This, from our good friends with the Journal of Oral and Maxillofacial Surgery. Who would have thought simply arming patients with effective postoperative care instructions could reduce their overall experience of pain? But it can. That’s why it’s so important to provide patients with a modicum of control when they feel they’ve surrendered it all to you. When creating post-op instructions, let them know the degree of pain they’re likely to experience, how to treat it, and for how long “normal” pain should last. By offering instructions that prepare them, you’ll help allay any fear their pain is unique and lessen chances of an unwarranted call to your office.

3. Keep your audience in mind

Language barriers, age and patient anxiety can each cause a patient to retain less of your postoperative care instructions than you’d wish. For this reason, you’ll want to craft instructions each of these audiences can take with them after a procedure. In other words, it can’t just be verbal. You’ve got to include written instructions as well. The upside? Compliance ends up being

greater as a result (a randomized clinical trial that looked at compliance of postoperative instructions following the extraction of impacted third molars bears this out).

4. Go beyond the computer printout

You may have the craftiest and most influential instructions, but what happens if the paper they're printed on gets run through the washing machine? Exactly. Extend the impact of the written word by offering instructions via email. This way, if any of your patients are among the 64% of Americans attached to their smartphones 24/7, they'll have your instructions wherever they are. That equals (again) less likelihood for rework, less patient dissatisfaction and fewer interruptions.

Technical Post-Operative Info.

[CityOfHope Guide](#)

These instructions will give you information about caring for yourself after your surgical procedure (surgery). Your treatment has been planned according to current medical practices, but problems sometimes occur. Call your health care team if you have any problems or questions after your procedure. Your nurse will review these instructions with you before you leave the hospital.

2 City of Hope One of the most important things you can do when recovering from surgery is to get out of bed and walk. This will help with digestion, proper breathing, blood circulation and will help prevent stiffness in your joints. For urgent needs, call your health care team. City of Hope locations and contact information are listed in the front of this booklet. Call 911 or get help right away if you have A life-threatening emergency such as:

- Severe chest pain
- Difficulty breathing
- Uncontrollable bleeding
- Signs of shock (rapid pulse; cold, pale and clammy skin; confusion; rapid breathing)
- Unconsciousness or nonresponsive
- High fever (100.4 °F or higher)

Important

- Do not do heavy lifting after surgery.
- Stay active as much as possible. Walking is a great way to keep active after surgery.
- Talk with your doctor or nurse if you have pain after surgery.
- Ask family and friends to help with your daily responsibilities as you recover from surgery.
- Maintain good nutrition and a balanced diet.
- Save your energy by prioritizing activities.
- Do not smoke. If you need help quitting, please ask your health care team.

RECOVERING AFTER SURGERY

3 Incision care Follow instructions from your health care team about how to take care of an incision, if you have one. Make sure you:

- Wash your hands with soap and water before you change your bandage (dressing). If soap and water are not available, use hand sanitizer.
- Change your dressing as told by your health care team.
- Leave stitches (sutures), skin glue or adhesive strips in place. These skin closures may need to stay in place for two weeks or longer. If adhesive strip edges start to loosen and curl up, you may trim the loose edges.
- Do not remove adhesive strips completely unless your health care team tells you to do that.
- Check your incision area every day for signs of infection. Check for:
 - More redness, swelling, or pain
 - More fluid or blood
 - Warmth
 - Pus or a bad smell

4 City of Hope After your surgery you will wake up, often slowly, usually in the recovery area. Your health care team will monitor your blood pressure, heart rate, breathing rate and blood oxygen levels until the medicines you were given have worn off. If you will be going home the same day, your health care team may check to make sure you can stand, drink and urinate. Tell your health

care team if you feel anxious or agitated. They may give you medicine to help you calm down. Your health care team will treat your pain and side effects before you go home. You may experience the following after anesthesia:

- Feel nauseous and vomit
- Have a sore throat
- Have mental slowness
- Feel cold or shivery
- Feel sleepy or tired
- Feel sore or achy, even in parts of your body where you did not have surgery

GENERAL ANESTHESIA What to expect after surgery

5 Follow these instructions at home for at least 24 hours after the surgery – Do not:

- Drive for 24 hours or use heavy machinery.
- Do not take part in activities where you could fall or become injured.
- Drink alcohol.
- Take sleeping pills or medicines that cause drowsiness unless prescribed by your doctor specifically for postsurgery care.
- Make important decisions or sign legal documents.
- Take care of children on your own.

General instructions

- Have a responsible adult stay with you until you are awake and alert.
- Return to your normal activities as recommended by your health care team. Ask your health care team what activities are safe for you.
- Take over-the-counter and prescription medicines only as told by your health care team.
- Avoid smoking. Ask your health care team about quitting.
- Keep all follow-up visits with your health care team. This is important. Call your health care team if you:

- Continue to have nausea or vomiting at home and medicines are not helpful
- Cannot drink fluids or start eating again
- Cannot urinate after 8 to 12 hours
- Develop a skin rash
- Have fever
- Have increasing redness at the site of your procedure

6 **City of Hope** Immediately following surgery you will receive nothing by mouth until you can swallow easily. You may be put on a clear liquid diet. If you are tolerating fluids well and your bowel sounds return, you may be allowed to move to a regular diet.

- Follow the diet recommended by your health care team.
- If you vomit, try drinking water, juice or soup.
- Drink enough fluid to keep your urine clear or pale yellow.
- Make sure you have little or no nausea before eating solid foods.
- Eat small frequent meals whenever you feel hungry.
- Eat foods high in protein.
- Drink liquids between meals, not with meals, because you may feel full faster.
- Use plastic forks and spoons if you have a metallic taste in your mouth.
- A small amount of physical activity, like walking before meals, can help increase appetite.
- Ask family and friends for help if you have trouble cooking/preparing meals.
- If you are having problems swallowing, ask for a referral to see a speech pathologist.

EATING AND DRINKING AFTER SURGERY

7 After surgery, coughing is an important way to keep the lungs clear and prevent infections. Sometimes patients have breathing problems after surgery that may require medical attention. This could be related to:

- Anesthesia given during surgery
- Pain at the surgical site
- Fluid in the chest cavity surrounding the lung following surgery
- Lung infection such as bronchitis or pneumonia
- Low oxygen level during physical activity

Your health care team may give you medicines to help you breathe easier. Follow instructions on any medication, oxygen, nutrition and exercise from your health care team consistently. Some medicines are taken regularly to help control your breathing. Some medicines are taken as needed for fast relief of shortness of breath. Use oxygen as prescribed. Keep track of your symptoms so you will know if breathing or coughing is getting worse. If you are on pulmonary rehabilitation, your daily exercise is a good time to assess whether your breathing is worse. Compare today with yesterday. If you become more short of breath from an activity that you tolerated well yesterday, that could mean a change in your condition and the need to call your health care team. You may cough up phlegm with some blood in it. If this happens, please contact your health care team right away. Call your health care team if:

- You become more short of breath at the same level of physical activity, or suddenly cannot do as much because of

shortness of breath • You cough is becoming more frequent or you are coughing up yellow or greenish or bloody sputum (saliva) • You seem to need more oxygen

BREATHING PROBLEMS AND COUGH AFTER SURGERY

8 City of Hope Breathing exercises

Your doctor may recommend that you use breathing exercises. Follow the instructions:

Pursed lip breathing

Pursed lip breathing is an important exercise after surgery. Pursed lip breathing is a controlled way of breathing in and out. It is a quick and easy way to slow your pace of breathing, making each breath more useful. You should count at a speed that is normal for you and not forced. Repeat this exercise as recommended.

- Relax your head, neck and shoulder muscles.
- Breathe in (inhale) slowly through your nose and count to 3, keeping your mouth closed and making sure that your belly pushes out as you breathe in.
- Do not take a deep breath; a normal breath will do.
- Hold your breath and count to 3.
- Pucker or “purse” your lips as if you were going to whistle or gently blow the flame of a candle.
- Breathe out (exhale) slowly through your pursed lips for three counts. Pursing your lips will slow the air flow as you breathe out.
- Repeat this five times (one set) and do it three times a day. When you are ready, slowly work up to doing one set five to eight times each day.

Controlled coughing

Coughing the right way will allow you to get mucus and other particles out of your lungs more easily to prevent infection. Follow the steps below and repeat the controlled cough a second time, if needed. Repeat this set of one to two controlled coughs as needed throughout your day.

- Step 1: Sit upright in a chair with your feet shoulder width apart.
- Step 2: Breathe in slowly through your nose so as not to cause an unexpected cough. (Inhaling with a series of small, short sniffs through the nose may be used instead to keep from causing an uncontrolled cough.)
- Step 3: Lean forward gently, open your mouth slightly and prepare to cough two times.
- Step 4: Cough once and breathe in slowly and gently through your nose. This may prevent an uncontrolled cough or keep you from breathing in loosened mucus. The first cough is used to loosen mucus.
- Step 5: Cough again and clear any mucus or other particles from your mouth by spitting into a cup or tissue paper. The second cough is used to bring out the mucus from your lungs.
- Step 6: Rest.

How to Use Your Incentive Spirometer

Your doctor wants you to use a breathing exerciser called an incentive spirometer (in-SEN-tiv speer-AH-meh-ter), or IS. It helps you to breathe deeply and shows you how well you are filling your lungs. Why do I need to use an IS? If your breathing pattern changes because of surgery, medications, immobility or other conditions, you may not breathe as deeply and frequently as you normally do to keep your lungs clear of secretions. This may lead to pneumonia or other complications. Using the IS will help you to avoid these problems. How do I use it?

1. Sit up as straight and comfortably as possible. Sitting up helps you to expand your lungs better. You may do this exercise in any position as long as the IS is held upright.
2. Place your lips tightly around the mouthpiece and exhale normally.
3. While keeping your lips around the mouthpiece, inhale slowly and deeply as if you were sucking in through a straw. Make sure the coach indicator stays between the two lines to ensure you are breathing in properly. The piston will rise while you breathe in.
4. Continue breathing in until your lungs are full. Try to make the piston reach or pass the indicator. When your lungs are full, hold your breath in for three to five seconds.
5. Continue to keep your lips around the mouthpiece and exhale. Take a few normal breaths and then repeat the exercise.
6. Do this 10 times every hour while awake, or as instructed by your health care team.

Helpful hints

- Using the IS may loosen up secretions in your lungs. If you are able, you should try to cough up the secretions. Be sure to have tissue or an emesis basin on hand.
- If you feel lightheaded while

using the IS, then stop and rest before continuing. • Avoid using your IS around mealtime as this could cause some nausea. • If you had surgery, you may have some pain or coughing while using the IS. Use the splinting or bracing instructions in this booklet to splint (support) your incision and reduce discomfort. Splinting or bracing to protect your incision when coughing When you feel the urge to cough, you may brace your incision (surgical cut). Take your hands or a small pillow and hug it to your incision when you cough, applying gentle but firm pressure. This bracing action will help support your incision and reduce the stress on the incision. If you tear any stitches, please call your health care team. 11 What are nausea and vomiting? Nausea is the feeling you get when you think you might throw up. Vomiting is when you actually throw up. These two things can happen together. But sometimes people feel nauseated without throwing up. Some people get nausea and vomiting after having surgery. This is called “postoperative” nausea and vomiting. Although it is usually not serious, it can still be unpleasant. There are ways to help prevent this and to treat it, if it happens. Talk with you health care team. What causes nausea and vomiting after surgery? The most common cause is general anesthesia. “Anesthesia” is a medical term for different types of medicine people get before surgery or another procedure. General anesthesia makes you unconscious so you cannot feel, see or hear anything while your surgery is happening. Not everyone who gets general anesthesia has nausea or vomiting after their surgery, but some people do. You are more likely to have nausea and vomiting after surgery if you: • Had nausea or vomiting before your surgery • Are female • Are less than 50 years old • Have had nausea and vomiting after surgery in the past • Have had motion sickness in the past • Get certain types of anesthesia medicines • Get certain pain medicines after surgery Nausea and vomiting are also more likely after certain types of surgery. NAUSEA AND VOMITING AFTER SURGERY 12 City of Hope Can nausea and vomiting after surgery lead to problems? Sometimes. It usually goes away on its own or with treatment. But in some cases it can lead to problems such as: • Your incision (cut) from surgery opening up again • Dehydration, which is when your body loses too much water Taking medicines to prevent or treat nausea and vomiting can help you avoid these problems. Talk to your health care team. How are nausea and vomiting treated? If you do have nausea and vomiting, doctors can treat it with medicines. How long does nausea and vomiting after surgery last? It depends. Most people who have nausea and vomiting feel better within 24 hours after their surgery. In some cases, a person might need to stay longer in the hospital because they still have nausea and vomiting. 13 Constipation is when a person has fewer than three bowel movements a week; has difficulty having a bowel movement; or has stools that are dry, hard or larger than normal. Many things can make constipation likely after surgery. They include: • Medicines, especially numbing medicines (anesthetics) and very strong pain medicines called narcotics or opioids • Feeling stressed because of the surgery • Eating different foods than normal • Being less active Symptoms of constipation include: • Having fewer than three bowel movements a week • Straining to have a bowel movement • Having hard, dry, or larger-than-normal stools • Feeling full or bloated • Having pain in the lower abdomen • Not feeling relief after having a bowel movement Diet • Eat foods that have a lot of fiber. These include fruits, vegetables, whole grains and beans. Limit foods high in fat and processed sugars, including French fries, hamburgers, cookies and candy. • Take a fiber supplement only as directed by your health care team. If you are not taking a fiber supplement and think that you are not getting enough fiber from foods, talk to your health care team about adding a fiber

supplement to your diet. • Drink clear fluids, especially water. Avoid drinking alcohol, caffeine and soda. These can make constipation worse. • Drink enough fluids to keep your urine clear or pale yellow.

PREVENTING CONSTIPATION AFTER SURGERY 14

City of Hope Activity After surgery, return to your normal activities slowly or when your health care team says it is OK. Start walking as soon as you can. Try to go a little farther each day. Once your health care team approves, do some sort of regular exercise. This helps prevent constipation. Bowel movements Go to the restroom when you have the urge to go. Do not hold it in. Try drinking something hot to get a bowel movement started. Keep track of how often you use the restroom. If you miss two to three bowel movements, talk to your health care team about medicines that prevent constipation. Your health care team may suggest a stool softener, laxative or fiber supplement. Only take over-the-counter or prescription medicines as directed by your health care team. Do not take other medicines without talking to your health care team first. If you become constipated and take a medicine to make you have a bowel movement, the problem may get worse. Other kinds of medicine can also make the problem worse. Call your health care team if you:

- Have not had a bowel movement in three days
- Used stool softeners or laxatives and still have not had a bowel movement within 24 to 48 hours after using them
- Or if you have any of the following:

- Bright red blood in your stool
- Abdominal or rectal pain
- Bad cramping
- Thin, pencil-like stools
- Unexplained weight loss
- A fever for more than two to three days
- A fever and your symptoms suddenly get worse

15 Will I feel pain after my surgery?

The amount of pain you will have, and how long it will last, depends partly on what kind of surgery you are having. How you feel after surgery also depends on your age, health and other existing medical problems. There are things your doctors and nurses can do to help control your pain. They will work together to make sure you are as comfortable as possible after your surgery. How is pain treated after surgery? After surgery, when your anesthesia wears off, you might need more pain medicines. Some are taken as pills. Some are given in other ways such as by injection (shot) or in a patch that goes on the skin. If you still have an IV or catheter, your doctor or nurse might continue to give pain medicines that way. How long will I have pain? It depends. After a minor surgery, you might feel fine a few hours afterward. After major surgery, you might need pain medicine for days or even weeks. Your health care team will work with you to make sure your pain is treated properly. City of Hope's Division of Supportive Medicine has pain specialists that can help control your pain and other symptoms. Talk to your health care team. What will happen after I go home after surgery? Your health care team will tell you what kind of pain to expect after your surgery. They may give you a prescription for pain medicines to take after you go home. It's important to take your pain medicines exactly the way the doctor or nurse tells you to. Taking too much of any medicine can be dangerous. In particular, opioids can cause serious problems if you take too much or mix them with other medicines. They can also lead to addiction in some people. Only take the amount your doctor or nurse tells you to, and stop taking the medicine as soon as your pain gets better.

MANAGING PAIN AFTER SURGERY 16

City of Hope Studies show that when patients actively participate in their pain management they have less pain when they return home after surgery. Research also shows that techniques like the ones below can help with surgical pain. Follow the steps below: Step 1: Belly breathing Taking deep breaths from your abdomen can reduce anxiety and relax your muscles which helps relieve pain around your surgical site. Start by relaxing your arms and legs. Take a deep breath, counting to 5 while you draw a long deep breath in. Exhale out slowly, counting to 5

while you slowly breathe out. Relax your jaw. Relax your throat. Take another long, slow deep inhalation, counting to 5 while you inhale. Now exhale out again, slowly, making your exhale as long as your inhale. Repeat 10 times. Step 2: Guided imagery Visualizing pleasant, soothing places and situations can “trick” your brain into a state of lessened pain and anxiety. Imagine a place you would like to go to such as Hawaii. Imagine the smells, sounds and sensations there, whether it is the sound of the ocean, the smell of salt water or the sensation of warm wind on your skin. Take some deep breaths while you are picturing this (go back to step 1). If you do not have a favorite place, borrow one of ours! Ask your nurse for guided imagery DVDs you can watch. MANAGING POSTSURGERY PAIN WITH MIND-BODY PRACTICES 17

Step 3: Positive distraction Research shows that a mind occupied with other thoughts is less able to experience pain. Work with your physical therapist and move as much as possible. Read, watch TV, do puzzles, talk to friends and family — do things to occupy your brain. If you are enjoying yourself, your body will release natural painkillers, called endogenous opioids, or “feel good” molecules, that will fight pain. Step 4: Speaking up Do not be afraid to ask for pain medications if your pain persists. Often patients express concern they will become addicted to painkillers after surgery. Research shows this is very rare if medications are taken as directed. The best way to prevent pain from developing in the future is to make sure you are managing it now, in the days following surgery. Step 5: Specialists are available Remember, pain is our body’s natural response to trauma (surgery), but with the preceding steps, it can be well managed, with minimal impact on your recovery. If your pain still persists, City of Hope’s Division of Supportive Medicine has pain specialists who are trained in various additional interventions that may help. Ask your health care team for a referral. 18

City of Hope What is a surgical site infection? A surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place. Most patients who have surgery do not develop an infection; but the possibility of an infection is always present. Cancer surgery can weaken your immune system, which puts you at higher risk for having an infection. Ask your health care team about the specific risks associated with your surgery and our practices to minimize your risk. Some of the common symptoms of a surgical site infection are:

- Redness and pain around the area where you had surgery
- Drainage of cloudy fluid from your surgical wound
- Fever

What do I need to do when I go home after surgery?

- Before you go home, your health care team should explain everything you need to know about taking care of your wound. Make sure you understand how to care for your wound before you leave the hospital.
- Always clean your hands before and after caring for your wound.
- Before you go home, make sure you know who to contact if you have questions or problems after you get home.
- If you have any symptoms of an infection, such as redness and pain at the surgery site, drainage or fever, call City of Hope’s Nursing Triage Call Center 626-218-7133.
- If you have additional questions, please ask your doctor or nurse. Call your health care team if you have:

- A fever of 100.4°F or higher
- Shaking chills or sweats, sore throat, cough, shortness of breath, vomiting
- Burning or pain when passing urine

Redness, swelling, drainage or warmth at the site of a surgical wound, IV line or anywhere on the skin

Keep track of the following: When your fever started Any other symptoms, such as chills, sweats, shortness of breath

PREVENTING SURGICAL SITE INFECTIONS 19

In general, having a cancer diagnosis puts patients at risk for blood clots, but blood clots are not common. Deep vein thrombosis (DVT) is a blood clot found in one of the major deep veins of the lower legs, thighs or pelvis. Blood clots block circulation through these veins, which carries blood from

the lower body back to the heart. When a DVT breaks loose and travels through the bloodstream to the lung, it becomes a pulmonary embolus (PE). This is a serious and life-threatening complication. Prevention is needed to stop a blood clot from becoming a serious and life-threatening complication. Call your health care team if you have:

- Pain in your leg that happened gradually
- Worsening leg pain when bending your foot
- Leg cramps at night
- Swelling in your leg
- Warmth and redness in your legs
- Sudden and severe trouble breathing

How are blood clots treated?

- Blood thinning medicines are used to prevent more blood clots from forming and to prevent blood clots from becoming loose and traveling to the lungs.
- After surgery, your health care team may ask you to take medicines to prevent blood clots. You may be given shots of the medicine immediately after your surgery to thin your blood. At the same time, you may also be given a blood thinning medicine by mouth.
- Your nurse may draw blood on a regular basis to check whether you have enough blood thinning medicine.
- After surgery, you may also be asked to wear compression devices on your legs. The squeezing action has been shown to prevent blood clots. You also may be given elastic stockings to wear.
- You may be instructed to get out of bed several times a day while recovering after surgery.

PREVENTING BLOOD CLOTS

20 City of Hope

- You may be asked to continue with blood thinning medicines when you go home after surgery.
- Ask your health care team before starting or stopping any medication, including over-the-counter medications. Many medicines increase or interfere with the effect of blood thinning medicines.
- Ask what foods should be avoided, because some foods may change the effectiveness of blood-thinning medicines.
- Tell any other medical professionals such as dentists or podiatrists that you are taking blood thinning medicines before having any procedures done.
- Stay active as much as possible. Try not to be inactive for long periods of time.
- Keep your legs elevated while sitting down or in bed.

21 The all new MyCityofHope is a secure online portal that lets you communicate with your care team and view your medical information. With MyCityofHope, you can:

1. Request appointments. Request your next appointment or view details of your past and future appointments.
2. Check most test results. No more waiting for a phone call or letter. View your results for most tests online at your convenience.
3. Communicate with your care team. Get answers to medical questions without multiple telephone calls or unnecessary appointments.
4. Pay bills online. Check and pay your bills from home.
5. Ask for prescription refills and renewals. Send a renewal or refill for any of your refillable medications.

How Do I Sign Up? To sign up, you will need the activation code found on your after visit summary.

1. Go to MyCityofHope.org.
2. Click the "New User Sign Up" box.

MYCITYOFHOPE ONLINE PATIENT PORTAL

22 City of Hope

3. Enter your MyCityofHope activation code from your after visit summary.
4. Follow the prompts to complete your registration.

If you have questions or need a new activation code, please call 844-777-4673. Activation codes expire 45 days after being issued. To learn more about MyCityofHope and to sign up, visit MyCityofHope.org.

Sources: ExitCare® Patient Information ©2018 ExitCare, LLC. UpToDate® ©2018 UpToDate, Inc. and/or its affiliates. All Rights Reserved. www.uptodate.com

23 PATIENT, FAMILY AND COMMUNITY EDUCATION Department of Supportive Care Medicine 2018 20000-NEW-19567 CityofHope.org