Instructor Manual

Teaching the Best Case/Worst Case Communication Framework

Introduction and Background Information

For frail, older adults, acute surgical problems can have life-altering effects. The mortality rate is high and serious postoperative complications can lead to loss of independence and burdensome treatments that may be inconsistent with the values and goals of many older patients. Unfortunately, the decision to proceed with surgery can result in unwanted care and postoperative conflict between surgeons, patients, and families.

We believe that part of the problem is the way in which surgeons have typically been taught to talk to patients about high risk surgery. Surgeons commonly use the language of informed consent to disclose isolated procedural risks, for example a 25% chance of renal failure or a 30% chance of stroke. While this strategy satisfies legal requirements, it does not allow patients to consider how they might experience adverse outcomes or anticipate expected downstream consequences that can result in unwanted aggressive treatments.

Our research group developed a communication tool called Best Case/Worst Case (BC/WC) intended for face-to-face discussions about treatment options in the context of serious illness. BC/WC is an intervention to support decision making that builds on the conceptual model of shared decision making and uses scenarios to help patients and families imagine what life might look like if they had surgery. BC/WC combines narrative description and a hand written graphic aid to illustrate a choice between treatments and to engage patients and families in deliberation. For each treatment, the surgeon describes a range of possible outcomes in the best case, worst case, and most likely scenarios.

As part of a pilot study, we have trained surgeons at the University of Wisconsin to use the Best Case/Worst Case tool and evaluated its use for frail, older patients who are hospitalized for an acute surgical problem. We found that using BC/WC transforms the structure of the decision-making conversation by focusing on a clear treatment choice, describing treatment outcomes rather than using statistics to disclose specific complications, and involving patients and families in deliberation over treatment options.

Notably, while our pilot data demonstrate that trained surgeons can learn to use BC/WC, we've found that people often hear about BC/WC and say, "I already do that." After analyzing numerous transcripts of preoperative discussions between patients and surgeons our research group has learned that in reality, most people don't already do that. For surgeons, BC/WC is really a very different way of communicating about risk and outcomes. We have identified common pitfalls for learners which we have highlighted in the training materials below along with strategies for coaches that we have developed through experience.

This manual provides step-by-step instruction for implementation of a 2-hour group training program to teach surgeons and surgical residents to use the Best Case/Worst Case communication tool. It also includes instruction for a 30-minute assessment session which is a critical component of the training. We hope this will help you and the surgeons you teach to develop comfort and expertise using this innovative communication tool.

Overall Goals for Teaching Session

1. Learners will practice breaking bad news to a simulated patient.
2. Learners will be able to create a BC/WC graphic aid including the best, worst and most likely outcomes for clinical scenarios where there is an option for either surgery or a less invasive procedure, medical management, or to shift focus to supportive care. Leaners will learn to include a phrase to elicit patient preferences on the graphic aid.
3. Learners will be able to use stories to describe a range of treatment outcomes using the BC/WC tool to facilitate a shared decision-making conversation about treatment options with a simulated patient.
4. Learners will practice making a treatment recommendation for a simulated patient.

Teaching Session Agenda

1st Hour: Focus on graphic aid construction

1. **Introduction (15 min)**
    a. Watch BC/WC Whiteboard Video
    b. Debrief and time for questions
    c. Review training itinerary including checklist and how to play a 'good' standardized patient
2. **Case A: Graphic aid construction (15 min)**
    a. Build BC/WC graphic aid individually
    b. Graphic aid construction in small groups
    c. Small group discussion with input from coaches
3. **Case A: BC/WC Demo (15 min)**
    a. Large group BC/WC conversation demo
4. **Graphic aid creation for case B (10 min)**
    a. Read assigned case for the 2nd hour and create a graphic aid. Coaches circulate to provide assistance.

2nd Hour: BC/WC small group practice*

1. **Case B: Practice in pairs (50 min)**
    a. Learners take turns playing surgeon, patient/surrogate/evaluator using the checklist (20-30 minutes per rotation)
    b. Coaches use time-outs to give feedback
2. **Follow up plan and conclusions (5 min)**
    c. Opportunities for additional practice and evaluation

Assessment (scheduled ≥1 week after completion of 2nd hour)

1. **BC/WC assessment in pairs (30 min per pair)**

**Hour 1 and hour 2 training may be executed as a single 2-hour block (preferred) or in two separate 1 hour blocks depending on logistics and coach preference/availability. The assessment should be scheduled at least one week following hour #2.*

Materials List

1. Participants:
    a. Coaches: We recommend coaches have a background in communication skills, education, and/or experience with surgical care of frail older adults near the end of life. Examples include palliative care physicians, individuals involved in residency curriculum and education development, or surgical critical care physicians. We recommend a ratio of at least one coach for every 4 learners.
    b. Learners: As Best Case/Worst Case requires clinical experience leaners should be at least PGY2 level of training or above. Class size may be as small as 2 learners, but we recommend limiting the training at approximately 20 learners per session.
2. General materials:
    a. Classroom equipped to show the BC/WC whiteboard video
    b. Stack of blank paper (will be used to create the BC/WC graphic aids) and pens
3. Coach materials for training:
    a. Instructor manual
    b. BC/WC Introduction PowerPoint presentation with embedded whiteboard video
    c. Copy of BC/WC hypothetical cases A and B (Appendices A and B)
    d. BC/WC checklist (one per leaner) (Appendix D)
    e. Annotated BC/WC checklist grading rubric (Appendix E)
4. Learner materials for training:
    a. Trainee manual
    b. BC/WC hypothetical case stems (Appendix A, B)
    c. BC/WC patient/surrogate decision maker character stems (Appendix C)
    d. Two blank sheets of paper (will be used to create the BC/WC graphic aids)
    e. BC/WC checklist (Appendix D)
5. Assessment materials:
    a. Coach materials
        i. One coach per pair
        ii. One checklist per learner (Appendix D)
    b. Learner materials
        i. One specialty specific testing case per learner (Appendix F)
        ii. One blank sheet of paper per learner
        iii. Character stems (Appendix C)

Teaching Session Logistics: Hour 1 (see Figure 1)

1. Introduction to Best Case/Worst Case (15 min)

Activity Objectives:

a. Introduction to the fundamental components of BC/WC:
    i. Create a graphic aid that illustrates the best case, worst case, and most likely outcomes for two treatment options
    ii. Break bad news
    iii. Tell a story about the best, worst and most likely outcomes for two treatment options that incorporates the patient's other medical problems
    iv. Elicit patient preferences; write a phrase to encourage deliberation on the graphic aid
    v. Make a treatment recommendation that incorporates the patient's preferences
b. Recognize that the goal of BC/WC is to improve patient understanding and decision-making, not to convince patient to have a specific treatment.
c. Review the components of the BC/WC checklist which will be used for evaluation during the training sessions.

Strategy: Brief introduction presented by one of the coaches to large group of learners. Use the provided PowerPoint slides to intrude the training itinerary and then the group will watch the BC/WC whiteboard instructional video together (video link is included in the presentation on slide #3). Use the slides to review the components of the BC/WC checklist (checklist elements are included on slide #5). Allow time for clarification and questions before having learners start to work on building a graphic aid for case A. The case stem is included on slide #7 and learners will have a paper copy of the case included in their training materials.

2. Case A: Graphic aid construction; practice written BC/WC components (15 min)

Activity Objectives:

a. Learn how to construct the BC/WC tool for a standardized case
b. Review appropriate patient accessible language to include in the graphic aid

Strategy: Time for individual learning followed by team based learning. Allow learners 5-7 minutes to create the graphic aid independently using case A (See Supplemental Appendix A). Learners should create the graphic aid using a blank sheet of paper. Then have learners work in groups of 2-4 to create a new graphic aid for case A together for the remainder of the 15 minutes. Coaches will circulate and provide feedback to groups.

Points to highlight when giving feedback: using language that is easy for patients to understand (i.e. avoid abbreviations and medical jargon), including appropriate amount of detail, ensuring both treatments are labeled, best case/worst case/most likely are all included, providing information about long term outcomes including death when appropriate. Make sure to emphasize writing "What is important to you now?" or similar phrase to encourage deliberation at the bottom of the graphic aid.

Coaches will correct missteps in creating the graphic and ensure that the completed graphic includes the appropriate 6 outcomes (best case/worst case/most likely for both treatments), accessible language, and has short phrases to highlight important patient outcomes and experiences.

3. Case A: BC/WC Demo; focus on oral BC/WC components (15 minutes)

Activity Objectives:

a. Observe how to use the BC/WC tool for communicating with patients
b. Identify specific language and strategies used to describe treatment outcomes while observing a simulated patient interaction with a coach
c. Recognize BC/WC communication tool components using the checklist

Strategy: As a large group, the coach will demonstrate a conversation using BC/WC with a simulated patient for Case A. The coach will show slide #8 in the PowerPoint presentation with an example of a graphic aid for Case A so learners can compare this to the graphics they created in their small group. Instruct learners to follow along with the BC/WC skills checklist (See Appendix D) during the demonstration. Set clear expectations that learners should watch for these components and that you will want specific feedback after the demonstration on what they heard/saw based on the checklist components.

The coach will bring in the standardized patient (or volunteer resident, additional coach or supporting staff). Start the encounter as if you've previously met but make sure to include "I have bad news…." This component of the conversation should be emphasized as it is commonly missed by learners and practicing clinicians in general. Demonstrate use of the tool using BC/WC language for case A. **Do not demo the entire conversation**, but ideally include parts of both the surgical and non-surgical treatment discussion (See Table 1). You will use "time-outs" to jump to different parts of the conversation, being clear about which part you will demonstrate next. As an example, after breaking bad news the coach could discuss the worst case and most likely scenarios for surgery, then jump to the best case of the non-operative

alternative before transitioning to preference elicitation. Make sure to demonstrate making a treatment recommendation linked to patient preferences, as learners often omit this step. Stop the demonstration after getting patient's goals and making a recommendation. After the demonstration, coaches will turn to the learners to ask what they observed. Focus the discussion around the BC/WC components outlined in the checklist.

Table 1: Key Elements to Include in the BC/WC Demonstration
• Make sure to explicitly break bad news. Include a statement like, "I have bad news…" at the beginning of the conversation. • Demonstrate at least one of the following: best case, worst case, or most likely scenario for both the surgical option and the non-surgical option • Use a phrase to encourage deliberation, such as "How are you thinking about this?" • Make a clear treatment recommendation linked to the patient's preferences

4. Case B: Graphic aid construction (10 min)

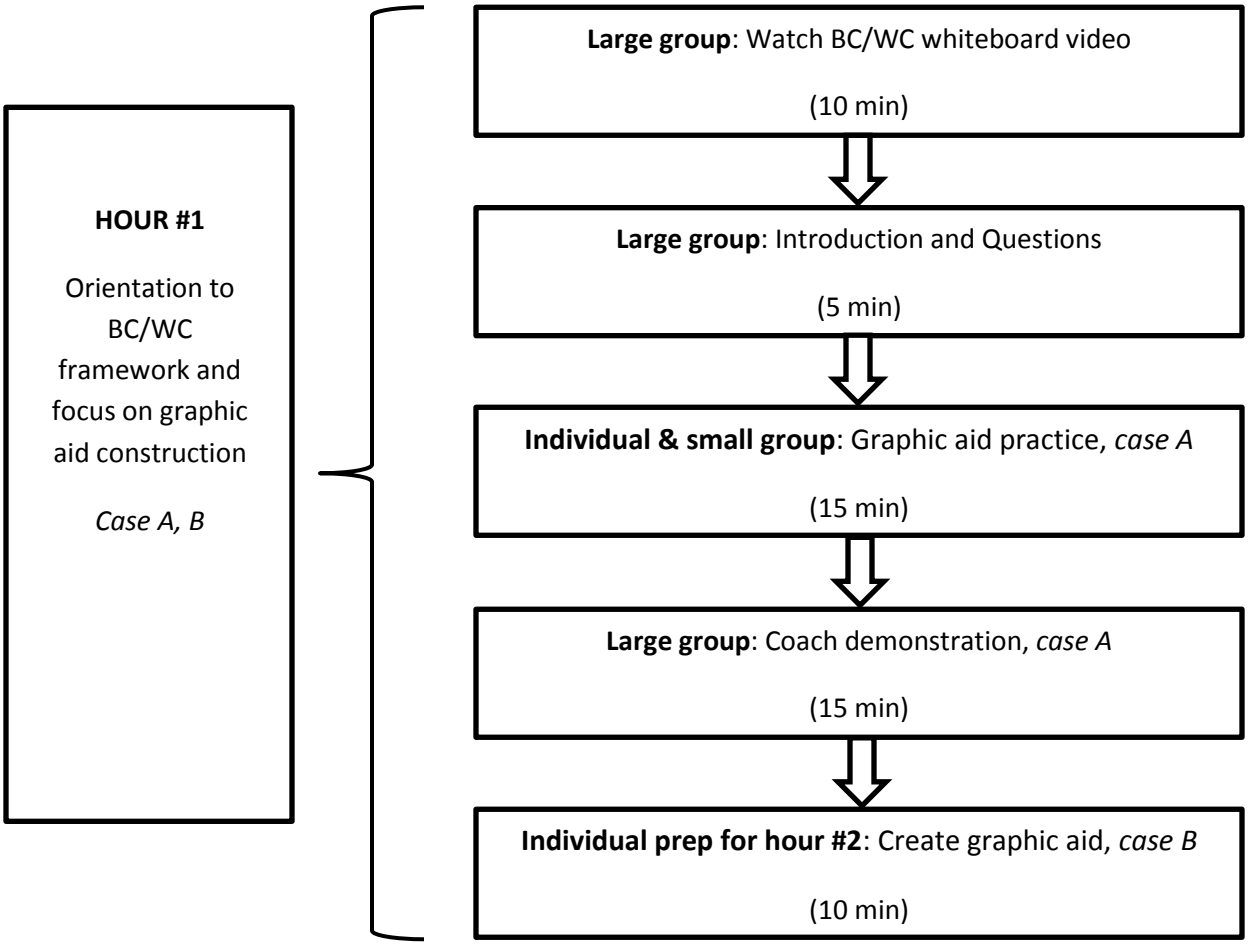
Activity Objectives:

a. Construct a graphic aid to use during the second hour of training
b. Learners will build on the feedback they received from coaches and peers when creating the tool for case A.

Strategy: Coaches instruct each learner to build a graphic aid for case B (See supplemental Appendix B). Inform learners that they will be using this case in simulation during the second hour of training. Encourage learners to create the graphic aid from a blank piece of paper. Coaches may circulate during this time to answer questions.

Note: If hour 1 and hour 2 are separated, we recommend that the coaches collect graphic aids to ensure that they are available when learners return for the second hour.

Figure 1: Flow of Training Hour #1



Teaching Session Logistics: Hour 2 (see Figure 2)

1. **Case B: Small group practice with role play (50 min total: 25 min per learner)**
   Activity Objectives:
   a. Practice a BC/WC conversation using a standardized case
   b. Review the key components of BC/WC by evaluating colleagues with the BC/WC skills checklist
   c. Incorporate feedback from the coach and peers based on observed elements from the BC/WC skills checklist to identify skills to practice before the assessment

Strategy: In groups of two, each learner will have an opportunity to practice BC/WC as the surgeon. Pairs are preferable with at least one coach per every 2 groups. If there are groups of three, the third person can be an evaluator and follow along with the checklist. When playing the surgeon, each learner will use the graphic aid he/she created for case B during hour #1 and the BC/WC framework in discussion with the simulated patient from start to finish (or until time is up; approximately 20-25 min). The other learner should play either the patient or the patient's surrogate, whichever character they feel most comfortable enacting. Surrogate character stems are provided in training materials to facilitate characterization of patient preferences during role play (See Appendix C). Coaches should be clear that they will use "time-outs" to provide feedback during role play. Examples of how and when to use time-outs are described in Tables 2 and 3.

Table 2: When to Call a Time-Out
• Learner misses a key component of the BC/WC • Learner uses risk estimates, statistics or jargon • The case appears to be stuck (i.e. Patient indicates confusion or learner is repeating information • Learner is not providing pauses or checking for understanding or responding to questions from the patient • Learner is focused on specific complications medical outcomes (e.g. heart attack, kidney failure) and needs to be reoriented to patient-oriented outcomes by telling a story about how the patient might experience medical outcomes

Table 3: How to Use Time-Outs
• Ask Learner "How is it going?" • If Learner is able to identify a stuck point or something he/she omitted, then discuss language they can use to get past the point or to add the needed piece of the tool. • If Learner does not identify something to try differently, note what you heard, "When you were discussing treatment option 1 best case, I noticed you used the phrase 'intubated on a ventilator and may even need a tracheostomy' and that the patient seemed confused…" • Discuss what if anything they would want to try differently next time • If there is time to go back to the stuck point or when something needed to be done differently, reverse the case to that point and give a line to the patient/surrogate to start (e.g. "let's start where you said, "and what is the worst case?" Alternatively, you may start from the point in the conversation at which you called the time out.

Before learners switch roles, the group will debrief and the coach will give specific feedback using the checklist as a guide. Start with asking how the learner feels about his/her performance. Focus on 1-2 aspects the learner did well and should continue to do. The coach will ask if the learner has anything he or she would do differently in the next case, and then discuss how to approach this. The coach will provide 1-2 examples of skills from the checklist that could be improved upon before the formal BC/WC assessment. Encourage other learner(s) to provide focused feedback based on the checklist. Examples of how to score leaners using the checklist are described in Appendix E). This annotated checklist is a good resource that provides examples of domains of BC/WC which learners can improve upon.

Coaches should pay particular attention to common challenges that leaners encounter when using BC/WC. Strategies to help leaners who are struggling with these components are provided in Table 4.

Note: In particular, we have found that learners often find it challenging to make a treatment recommendation. This may be because the learner acting as the patient/surrogate will respond to the question, "How are you thinking about things?" by stating a treatment preference, for example, "Dad was independent. I think we should go with the non-surgical options." As a result, the learner playing the surgeon is forced to agree with the stated treatment preference rather than actually incorporating the patient's values and goals into a recommendation. To address this, encourage learners to refer to the character stems when playing the patient/surrogate. In addition to providing ideas for patient goals, this sheet includes phrases learners can use in response to the question "How are you thinking about things?" that prompt the surgeon to ask follow up questions to better understand the patient's values and goals.

Figure 2: Session 2 Logistics

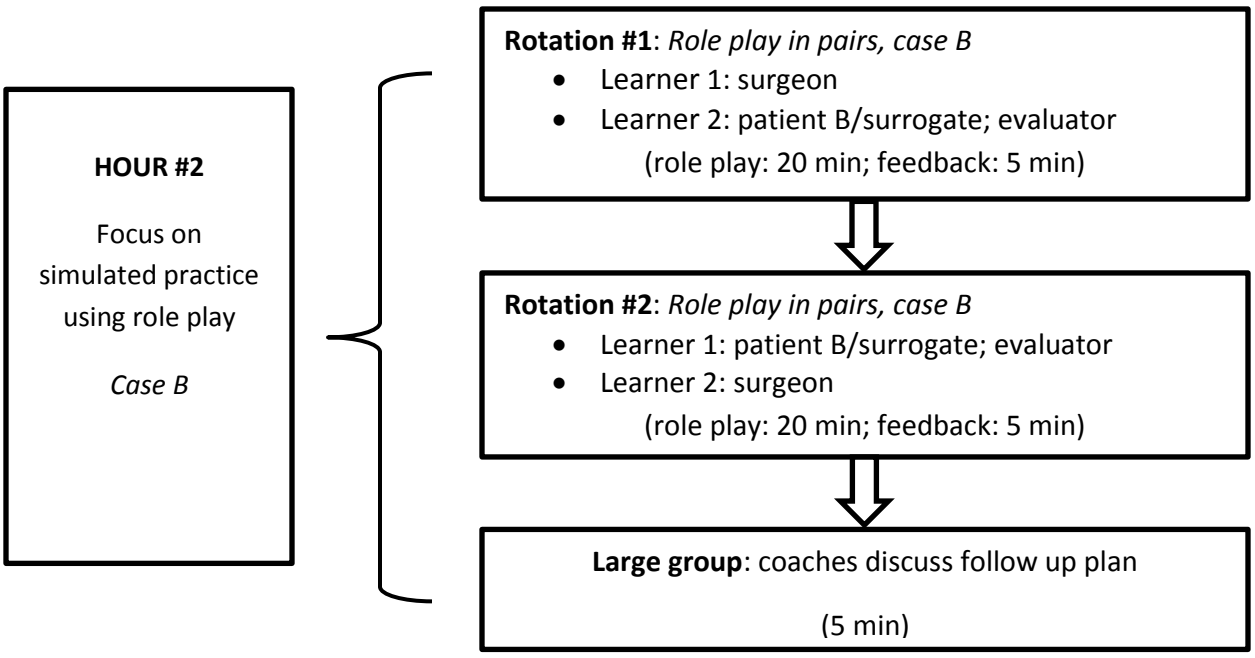


Table 4: Common Errors and Coaching Strategies	
Error	**Strategy**
Learners commonly do not break bad news. Instead, they explain technical details of the disease process or results of imaging studies.	• Prompt leaners to use the phrase, "I have bad news…" • Include this statement in the large group demo during hour 1
Learner use abbreviations such as "SNF" on the graphic aid that are confusing for patients.	Review graphic aid with learner and suggest alternative terminology, such as "nursing home" instead of "SNF"
Learners forget to write, "What is important to you now?" or similar phrase on the graphic aid.	• Emphasize this component of the graphic aid during the small group graphic aid practice during hour 1 • Suggest follow up questions to clarify patient goals such as, "Tell me what you mean by X…." or "Tell me more about X."
Learners don't make a treatment recommendation linked to patient preferences. • Learners may feel that making a recommendation is not part of shared decision making and is not "their role."	• This may be because the learner hasn't sufficiently elicited preferences from which to base their recommendation. Suggest follow up questions (see above) and encourage leaners to PAUSE to allow patients time to respond. • Encourage learners playing the patient/surrogate to refer to the character stems for ideas on patient values and goals • More junior residents in particular may hesitate with suggesting treatment plans without approval of a senior resident or attending. Remind them that for the purposes of simulation they should make a recommendation. • Remind learners that patients and families often appreciate the clarity of a recommendation that is aligned with their values and goals.

2. **Follow-up plan and conclusions (5 minutes)**

   Activity Objectives:

   a. Learners will self-identify what aspect of using BC/WC will be the most difficult for them and what components to practice prior to the assessment
   b. Prepare learners for assessment exercise

Strategy: Ask learners to think about specific BC/WC components they would like to practice. First, the coaches will ask: "What do you think will be the most difficult aspect of using the tool with patients for you?" Coaches can encourage learners to refer to the items they missed on the checklist for guidance about what to practice. The coaches will discuss the importance of continued practice. Coaches will inform learners of the 30-minute assessment. Emphasize that the BC/WC checklist will be used to score learners during the assessment and the BC/WC Whiteboard video is a useful resource to review essential tool components. Coaches should review common challenges learners encounter when using BC/WC, See Table 4: Common Errors.

Assessment

1. **BC/WC assessment in pairs (30 min)**

   Activity Objectives:

   a. Use BC/WC in one conversation with a simulated patient from start to finish
   b. Receive a score based on completed components using the BC/WC checklist
   c. Identify areas to focus continued practice

Strategy: Assessments may occur at any point at least one week after completion of training hour #2 to allow learners time to practice the areas for improvement they identified during training. Learners will participate in the assessment in pairs. Each learner will receive a new, different hypothetical case (See Appendix F: Cases for testing, note that cases are organized based on surgical subspecialty). Learners will have 5 minutes to create a graphic aid. Each leaner will have 10-12 minutes to have a conversation from start to finish using BC/WC while the other learner plays the patient/surrogate. The coach will observe and score the learner using the BC/WC checklist but will NOT use time-outs or provide any feedback during the conversation. Learners will switch roles. At the conclusion of the assessment the coach will collect the graphic aids and complete the BC/WC checklist. The coach may give feedback with any remaining time. At this time we do not have a score that determines competence but we anticipate that it will be approximately 10-11 out of 15. We recommend that learners who score below this range should be encouraged to practice and be given the opportunity to re-testing at a later date if they desire.