Learner Guide: Resident Physicians & Advanced Practice Providers (APPs)

Best Case/Worst Case-ICU (BC/WC-ICU)

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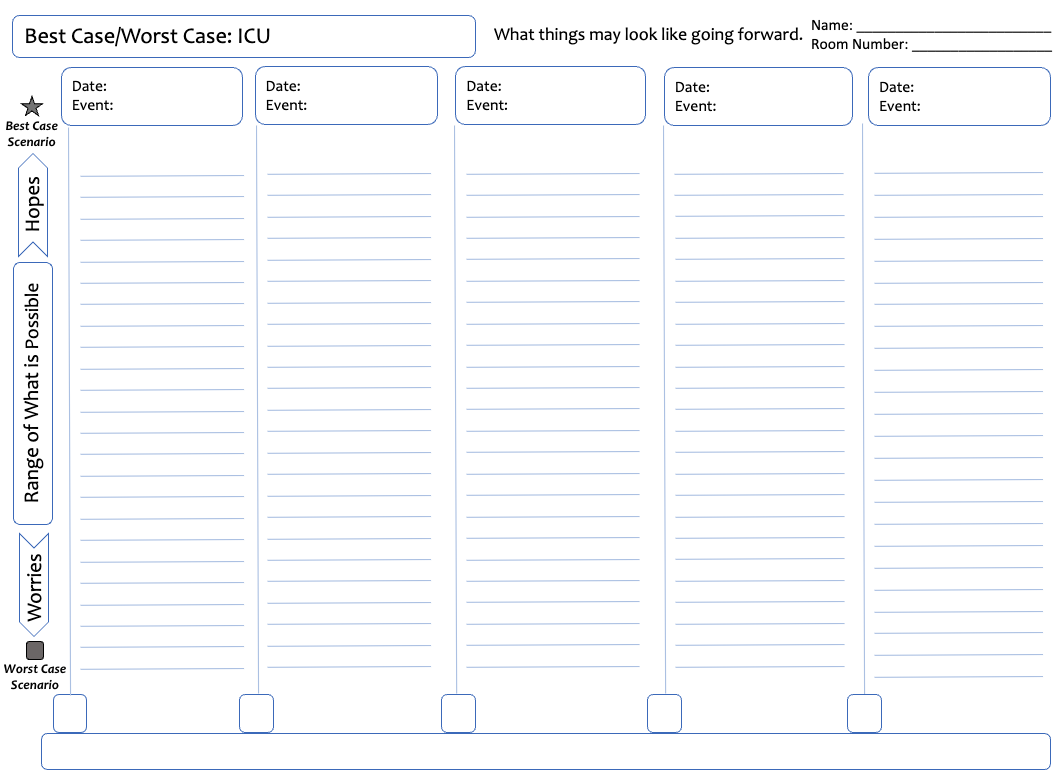
**Introduction**

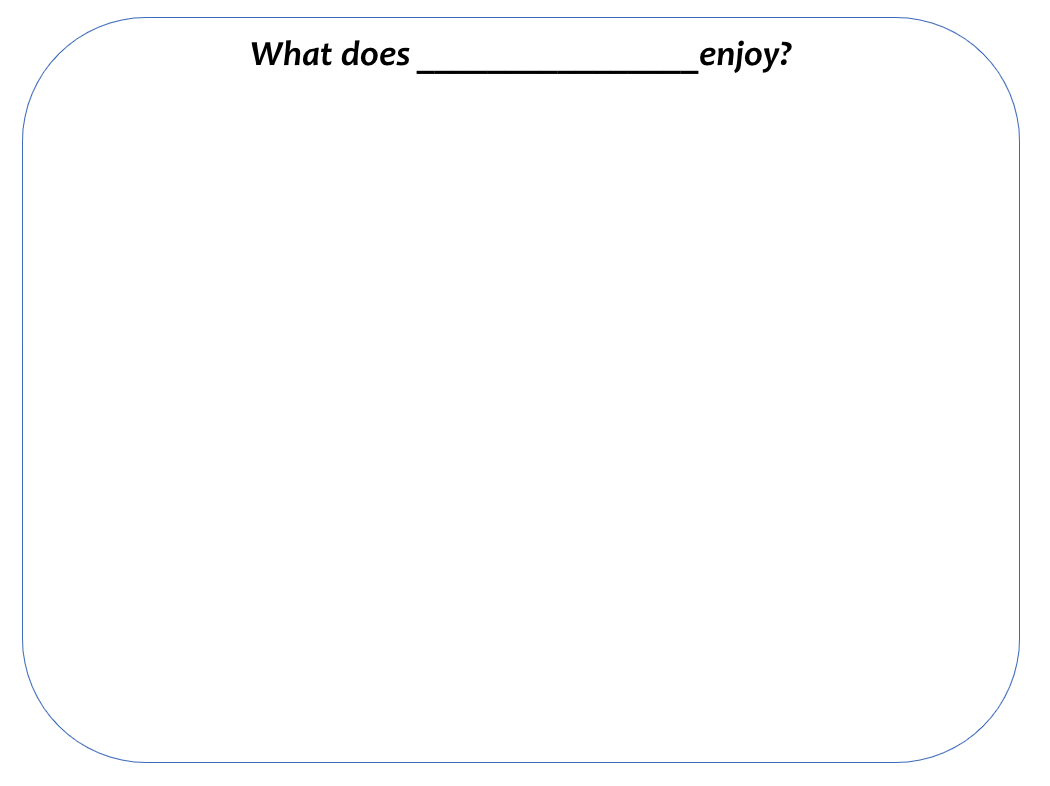
Have you ever taken care of a frail elderly trauma patient in the ICU who experiences multiple complications and eventually succumbs to her injuries on day 15 – much to the surprise of her family, even though you foresaw this trajectory on day 2 of her hospitalization? We believe that this is a difficult and frustrating problem for clinicians, patients, and their families, because it can lead to unwanted care and real harms for all involved. To address this problem, we have developed an intervention called Best Case/Worst Case for the ICU (BC/WC-ICU) to help you and your team better support the communication needs of serious ill patients and their families.

**Learning Objectives**

* Describe the BC/WC-ICU tool and your role as the Resident/APP
* Identify major events in the clinical course that change the Best Case
* Translate the outlook that attendings and fellows describe (Best Case and Worst Case Scenarios) into bullet points on the graphic aid to communicate this information to patients and families
* Demonstrate ability to use the graphic aid to communicate “what we are hoping for” and “what we are worried about” to patients and families
* Discuss ways to encourage team use of Best Case/Worst Case-ICU during ICU rounds

**The Best Case/Worst Case-ICU Graphic Aid**





**How to Learn about Best Case/Worst Case-ICU (Self-Guided)**

If you are unable to attend in-person training but would like to learn more about the tool and how to use it, there are a variety of self-guided learning sessions below to fit your schedule.

If you have ~15 minutes:

* Watch this Whiteboard Video demonstrating the basics of BC/WC-ICU (<https://www.youtube.com/watch?v=31pv2Rlp6R4>) - **9 minutes**
* Read through the Step-by-Step Guide included in this manual for guidance on how to use the tool - **5 minutes**

If you have ~30 minutes:

* Watch this Whiteboard Video demonstrating the basics of BC/WC-ICU (<https://www.youtube.com/watch?v=31pv2Rlp6R4>) - **9 minutes**
* Read through the Step-by-Step Guide included in this manual for guidance on how to use the tool - **5 minutes**
* Watch this video of an ICU team using BC/WC (<https://www.youtube.com/watch?v=93I18zvt4Xg>) **- 4 minutes**
* Use [Case 2 SD Patient Case](https://patientpreferences.org/wp-content/uploads/2023/08/Case-2-SD-Patient-Story.pdf) to watch an application of BC/WC-ICU
  + Read through the written patient case - **2 minutes**
  + Watch the [Case 2 SD Video](https://youtu.be/A_D9myBodCo) – **11 minutes**

If you have ~45 minutes:

* Watch this Whiteboard Video demonstrating the basics of BC/WC-ICU (<https://www.youtube.com/watch?v=31pv2Rlp6R4>) - **9 minutes**
* Read through the Step-by-Step Guide included in this manual for guidance on how to use the tool - **5 minutes**
* Watch this video of an ICU team using BC/WC (<https://www.youtube.com/watch?v=93I18zvt4Xg>) **- 4 minutes**
* Use [Case 2 SD Patient Case](https://patientpreferences.org/wp-content/uploads/2023/08/Case-2-SD-Patient-Story.pdf) to practice using BC/WC-ICU
  + Read through the written patient case and, based on the daily updates, complete the graphic aid for this patient for as many days as you are able – **8 minutes**
  + Watch the [Case 2 SD Video](https://youtu.be/A_D9myBodCo) and compare your graphic aid with the sample graphic aid generated for this patient in the video – **11 minutes**

If you have ~60 minutes:

* Watch this Whiteboard Video demonstrating the basics of BC/WC-ICU (<https://www.youtube.com/watch?v=31pv2Rlp6R4>) - **9 minutes**
* Watch this video of an ICU team using BC/WC (<https://www.youtube.com/watch?v=93I18zvt4Xg>) **- 4 minutes**
* Use [Case 2 SD Patient Case](https://patientpreferences.org/wp-content/uploads/2023/08/Case-2-SD-Patient-Story.pdf) to practice using BC/WC-ICU
  + Read through the written patient case and, based on the daily updates, complete the graphic aid for this patient for as many days as you are able – **8 minutes**
  + Watch the [Case 2 SD Video](https://youtu.be/A_D9myBodCo) and compare your graphic aid with the sample graphic aid generated for this patient in the video – **11 minutes**
* Use [Case 1 AB Patient Case](https://patientpreferences.org/wp-content/uploads/2023/08/Case-1-AB-Patient-Story.pdf) to practice using BC/WC-ICU
  + Read through the written patient case and, based on the daily updates, complete the graphic aid for this patient for as many days as you are able – **8 minutes**
  + Watch the [Case 1 AB Video](https://youtu.be/5dak7OMDeWc) and compare your graphic aid with the sample graphic aid generated for this patient in the video – **13 minutes**

Read through the Step-by-Step Guide included in this manual for guidance on how to use the tool - **5 minutes**

**How to Use Best Case/Worst Case-ICU:**

**Step-By-Step Completion of the Graphic Aid**

**Step 1 – Note the Date of Admission**

Write the patient’s name or initials and room number at the top of the graphic aid. Note the date of admission in the first column.

A screenshot of a computer

Description automatically generated

**Step 2 – Note the Events**

In the next column, write the date you are rounding on the patient and any significant events that happened during the past twenty-four hours.

A screenshot of a computer

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**Step 3 – Add Outlook to the Systems-Based Patient Presentation**

During morning rounds, at the end of the systems-based presentation, include “outlook” to stimulate a description of the Best Case Scenario.

For example,

**Neuro**: stable SDH, q1h neurochecks, sedation with propofol

**Cardiac**: afib (chronic), rate controlled on IV equivalent of home metoprolol, holding home warfarin

...

**MSK**: plastic surgery consulted for facial fractures, will see her in a few days when swelling goes down to discuss operative treatment; per Ortho right arm and hip fractures are non-operative; non-weight bearing in both extremities with right arm sling in place

**PPx**: SCDs, holding SQH until tomorrow (24h after stable head CT)

**Outlook: “What is the outlook?” or “In the Best Case Scenario we are hoping …”**

**Step 4 – Place the Star**

Draw a star on the line to represent the Best Case Scenario. Placing the star higher on the line and further from the box (Worst Case Scenario) indicates there is much uncertainty between the Best and Worst Case Scenarios. Placing the star lower on the line and closer to the box (Worst Case Scenario) indicates that the Best Case Scenario is close to the Worst Case Scenario.

A screen shot of a calendar

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**Step 5 – The Best Case Scenario: What we are hoping for**

Use your knowledge and expertise to tell a story about what might happen if things go as well as we might hope. The story should use patient-familiar words and have a beginning, a middle and an end. The story should describe the care that they will receive as their course progresses and what the patient’s life will be like over time, specifically: additional interventions, estimated time in the ICU, rehab, anticipated cognitive and functional recovery, disposition and post-hospital support needs.

To memo the Best Case Scenario for patients and family members/loved ones, write short notations about this story next to the star for that day on the graphic aid.

A screenshot of a medical report

Description automatically generated

**Step 6 – The Worst Case Scenario: What we are worried about**

Describe what we are worried about if the patient’s story unfolds poorly. The Worst Case Scenario doesn’t always change based on major events, so it may not need to be updated every day. You can draw a line across the bottom box as the days progress if you want to show that the Worst Case Scenario has remained the same.

A screen shot of a medical report

Description automatically generated

**Step 7 – Update the Graphic Aid daily**

Each day, update the BC/WC-ICU graphic aid. **If an event occurs that will change the outlook** for the patient, write it down. If nothing has happened to change the outlook, write “none” or use a strikethrough.

Again, place the star for the Best Case Scenario on the line for that day, considering how events affect the placement of the star in relationship to the box (the Worst Case Scenario). If the position of the star has stayed the same, and there are no events that would be expected to alter the outlook, you may simply place the star in the same location or draw an arrow over. Describe the outlook verbally during rounds, even if there are no changes, in order to reinforce what we are hoping for (Best Case Scenario) with the ICU team.

A screenshot of a medical test

Description automatically generated

**If the position of the star has changed (because of an event)**, tell a new story that describes the change in outlook, the new Best Case Scenario. For example, if a patient has a stroke, you will want to place the star lower on the line, closer to the Worst Case Scenario. The Best Case Scenario has now changed and is less favorable than it was before this new event.

Provide a narrative that lays out what we expect over time because of this new event (e.g., additional interventions, estimated time in the ICU, rehab, anticipated cognitive and functional recovery, disposition and support, what their life will be like). Write short notations about the updated story next to the star for that day.

A screenshot of a medical report

Description automatically generated

**Step 8 – What does the patient enjoy?**

On the back of the graphic aid there is a space for families to tell the team about the patient. **Anyone** on the team can help them complete this, or they can complete it on their own.

A white rectangular object with black text

Description automatically generated

It helps us to know more about Annabel. What is she known for?

What makes her happy?

What does she enjoy doing?

Annabel

-plays piano

-enjoys spending time with her seven grandkids

-likes to read historical fiction

**Step 9 – Display the graphic aid**

Display the graphic aid in the patient’s room so that the family and team can access it. Either side of the graphic aid can be displayed. Bring the graphic aid out daily for rounds so that the Best Case Scenario can be updated based on any major events from the previous 24 hours.

**Using BC/WC-ICU as a Team**

* **Generating the outlook:** (Recommended: Attending/Fellow)
  + It is important that a team member with experience generates the outlook: they need to use their experience and knowledge to tell the story of the Best Case and Worst Case Scenarios. The attending or fellow may want to invite a resident to generate the outlook and then confirm or adjust the story.
  + If the team member leading the systems-based patient presentation has the experience to generate the outlook, they can do so by starting, “In the Best Case Scenario, we are hoping…”
  + If the team member leading the systems-based patient presentation does not feel that they have the experience to generate the outlook, they can prompt the attending/fellow to describe the outlook at the end of the review by saying “What is the outlook?”
* **Annotating the graphic aid:** (Recommended: Resident/APP)
  + Someone on the team will be responsible for writing the patient’s name, room number, and date on the graphic aid. They will also list any overnight events, draw the star related to prognosis, and write bullet points next to the star to briefly convey the Best Case Scenario to family members. If they have questions about what overnight events should be listed, or how to represent the Best Case Scenario with bullet points on the graphic aid, they should ask the person who is generating the outlook.
* **Confirming graphic aid notes with the team:** (Suggested: Initiated by Resident/APP)
  + It may be helpful to pause after generating the outlook and review the graphic aid as a team to ensure everyone is on the same page. The team can confirm the location of the star (Best Case Scenario) in relation to the square (Worst Case Scenario), what event(s) are listed at the top of the day, and what bullet points describing the Best Case Scenario are listed next to the star.
* **Using the graphic aid with patients and families/loved ones:** (Any team member)
  + If family is at the patient’s bedside, the physicians or APPs caring for the patient should use the graphic aid during their daily communication with family members. If daily updates with family occur over the phone, it is still useful to describe the Best and Worst Case Scenarios. Remember that the Best Case Scenario describes “what we are hoping for” and the Worst Case Scenario describes “what we are worried about”.
  + Discussing the graphic aid with families is not limited to physicians or APPs. Nurses, therapists, pharmacists, and other team members can all use the graphic aid to discuss the patient’s care or outlook with their family members. If the family has additional questions about the graphic aid any team member can reach out to resident physicians, APPs, or attending physicians to further discuss the graphic aid with the family.
* **Filling out the back side of the graphic aid:** (Patients, family members, any team member)
  + Family members can fill out the back side of the graphic aid to share more about their loved one. Anyone on the team or who participates in the patient’s care can encourage the family to complete this and assist them if needed.

**Using BC/WC-ICU to Talk to Patients and Families/Loved Ones**

As a member of the trauma ICU team, you may provide daily updates to patient family members and loved ones. If family members are physically present in the ICU, get the graphic aid from where it is displayed in the patient’s room to help guide your conversation.

**You might consider asking what they have been told about the patient before sharing the story from your perspective.** This will help identify gaps in their understanding which you can address during your conversation.

**If family members are not familiar with the graphic aid, it may be helpful to provide some information about the purpose of the graphic aid** before using it as a guide to an update on their loved one’s condition. Some language you can use to introduce the graphic aid is below:

*“This is a storyboard about [patient name]’s time in the hospital. Each one of these columns is a day here in the ICU. We want to talk about the range of what we are hoping for and what we are worried about, so we can keep track of what is happening for your loved one over time with you. It doesn’t have all the specific details about how we are caring for them – it is just a way for us to focus on the big picture, so we’re all on the same page.”*

**Please do not describe the graphic aid as ‘part of a research study’**, as this may confuse patients and their families. It is important for you as a clinician to understand that while we are studying the effect of this intervention on communication, using a diagram to communicate with families is not experimental.

**Once family members are familiar with the purpose of the graphic aid, you can transition to providing a daily update.** Start by referencing the current day on the graphic aid and highlighting the bullet points next to the Best Case Scenario. You can share this information by saying something like, *“Here is where we are today. Yesterday, [describe the major event, if there is one]. In the Best Case Scenario, here is what we are hoping for as things move forward.”*

**After you have shared the story of the Best Case Scenario,** or *“what we are hoping for”*, you might ask if they want to know *“what we are worried about”*, the Worst Case Scenario. You can ask family members if they would like to discuss this by asking, *“Do you want to hear what we are worried about?”*, or *“Could I share with you what we are worried about?”*

**Next, you can offer additional context that may be helpful for the family**. They may have questions about events from previous days or want to review procedures, tests, or planned events that are scheduled for today.

**It is helpful to review the Best Case Scenario daily** with families to reinforce *“what we are hoping for”*. If the Worst Case Scenario has been stable and previously communicated, you may not need to revisit this in your daily update to family members. Some people may not want to discuss the Worst Case Scenario at all, and that is fine.

**If family members are not present in the ICU and you are providing an update over the phone**, you may wish to use the graphic aid as a reference for yourself. Consider starting by asking what they have been told about their loved one. You can then transition to sharing an update by saying, *“here is what we talked about in rounds this morning about how [patient] is doing – in the Best Case Scenario, we are hoping that…”*.

**To learn more about Best Case/Worst Case-ICU**

* Visit our website at [www.patientpreferences.org/bcwc-icu/](http://www.patientpreferences.org/bcwc-icu/)
* Best Case/Worst Case ICU Graphic Aid available online
* Sample Cases
  + [Case 1 Patient Story (AB)](https://patientpreferences.org/wp-content/uploads/2023/08/Case-1-AB-Patient-Story.pdf)
  + [Case 1 Video](https://youtu.be/5dak7OMDeWc)
  + [Case 2 Patient Story (SD)](https://patientpreferences.org/wp-content/uploads/2023/08/Case-2-SD-Patient-Story.pdf)
  + [Case 2 Video](https://youtu.be/A_D9myBodCo)
* Video resources
  + Learn more about BC/WC-ICU by watching this video <https://www.youtube.com/watch?v=31pv2Rlp6R4>
  + Watch an ICU team demonstrating how to use BC/WC-ICU <https://www.youtube.com/watch?v=93I18zvt4Xg>

**To contact the study team**

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