**DRAFT RTSS Ingredient Quick Reference Guide with Examples**

**Ingredients for Representation (R) knowledge targets from Dunlosky et al. (2013)**

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| Ingredient | Definition | Examples |
| Elaborative interrogation | Generating an explanation for why an explicitly stated fact or concept is true. | Why are we using the ICF model rather than a medical model for this study?  Why would it be important to practice daily rather than many times on one day per week? |
| Self-explanation | Used more for explaining thinking and knowledge while performing a task. | How is using this strategy is different from what you have been doing?  Why are you using this strategy to remember dates? |
| Successive Relearning | Combination of practice testing and distributed testing (see *Practice testing*). | See *Practice testing*. |
| Practice testing | Self-testing or taking practice tests over to-be-learned material. | Use of flash cards, short quizzes pre- and post-teaching, teach-back of content.  Can be verbal or visuospatial materials |
| Distributed practice | Implementing a schedule of practice that spreads out study activities over time. | Schedule multiple sessions per week and add R motivation ingredients to increase home practice. |
| Interleaved practice | Implementing a schedule of practice that mixes different kinds of problems, or a schedule of study that mixes different kinds of material, within a single study session |  |

**Ingredients for Representation (R) knowledge targets from the RTSS Manual:**

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| Ingredient | Examples |
| Providing information in multiple modalities | Explaining the ICF with both a verbal explanation and a graphic |
| Guiding performance | Talking through a sequence step-by-step or providing hand-over-hand guidance |
| Providing cues | Giving a semantic or phonemic cue if the patient can’t recall a term |
| Providing feedback (e.g., evaluative, encouraging) | Telling the patient that 3 of 4 responses were correct or “that’s a good start” |
| Using specialized sequence training methods, e.g., spaced retrieval, backward/forward chaining, vanishing cues | Using spaced retrieval schedule to train new vocabulary or concepts |
| Changing frequency or directiveness of cues (i.e., using a cueing hierarchy) | Providing most-to-least cues as patient improves on a performance aspect (speed, accuracy, effort, frequency) |
| Using organizational methods, e.g., chunking, outlining, scaffolding | Using the ICF as an organizational framework for teaching the patient about the treatment approach and targets vs aims |
| Prompting rehearsal | Asking the patient to practice teach-back before telling you |
| Linking to prior knowledge | Explicitly connecting specific treatment targets to the patient’s everyday complaints |
| Using Socratic questioning | What types of activities did you do as part of your previous “brain building” therapy? When you were doing those activities, did you end up with a certain “mind-set” or strategy that helped you be successful? In this therapy, we’re going right to that strategy rather than hoping it comes up indirectly while someone is practicing mental games. |
| Providing internal aids (e.g., mnemonics) or external aids (e.g., assistive devices) | Giving handouts |
| Encouraging patient to problem solve | Ask patient what would help him/her remember the information |
| Selecting and positioning materials to facilitate learning | Keeping the workspace uncluttered so patient can focus on the treatment materials |

**Ingredients for Representation (R) motivation/self-efficacy targets from Michie et al (2013):**

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| Ingredient | Examples |
| Mental rehearsal of successful performance | Let’s think through the steps you would follow to use this at home. |
| Self-talk | What could you say to yourself to increase your confidence? |
| Focus on past success | Can you give me an example of a time you were successful? What did you do to be successful that time?  From Sohlberg (2019): what resources have helped you overcome obstacles in the past and how can they be deployed here? |
| Verbal persuasion to boost self-efficacy | I’ve observed you doing X, which would help you be successful in this treatment |
| Persuasive argument | What information could I or others provide that would help you decide if this would work for you? |
| Pros and cons | What would be the up- and down-sides of using this strategy? |
| Comparative imagining of future outcomes | Imagine where you might be in 6 months with vs. without this intervention. |
| Identification of self as role model | [Maybe as role model for other military personnel?] |
| Self-affirmation | What are your good qualities that will help you succeed in this intervention |
| Identity associated with changed behavior | Would this help you fulfill all your life roles? |

**Ingredients for Representation (R) motivation/self-efficacy targets from the SCORE Manual:**

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| Ingredient | Examples |
| Reframing cognitive symptoms as nonspecific and multifactorial | Lots of things can affect memory, like not getting enough sleep. |
| Reframing problem chronicity as resulting from complexity and that they will recover with treatment, vs. permanent problems | You’ve got a lot going on that can impact your recovery. |
| Reiterating that problems will recover | Most people with a concussion get better. |

**Ingredients for Representation (R) motivation/self-efficacy targets from Bland et al (2016), adapted for Core-SCORE:**

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| Ingredient | Examples |
| Reminding of personal goals selected | “Do you remember what your goals are (show folder)? Which one of those would you like to work on?” |
| Choosing from among previously stated goals | “You told me you wanted to get back to \_\_, \_\_, and \_\_. Which of those should we focus on next?” |
| Asking about next goal | Would you like to choose another activity to help you with your goal of \_\_\_? Or would you like to move on to a different goal?” |
| Adapting goals to meet patient’s current concerns | “It seems like with you feeling so badly today that something like entering data into your planner isn’t your top priority. What would you say is your number one priority today?” |
| Offering choice in activities related to goal | “For you to work effectively, you’ll probably need to \_\_\_(targets 1, 2, 3). Which of those sounds good to work on first?” |
| Allowing patient to choose activity | “What do you want to practice next, using the script or writing notes?” |
| Going along with what patient says | Patient: “I really want to get use a different planner”  Therapist: “Ok, that sounds great!” |
| Discuss activities collaboratively | “From what you’ve said, one of the things you need to do for work is\_(goal)\_. As a step toward that, can we practice \_(target)\_ today?” |
| Explicitly link activity to goal | “Practicing your attention strategy is key to working in your typical environments, which is critical for your success at work.” |
| Clarifying or filling in as needed | Patient: “So we are going to talk about my disorganization today?” Therapist: “Yes, that’s the activity we came up with last time to get into the habit of checking your to-do list every morning.” |
| Aim for a challenge | “Great we will work on your strategy of asking people to slow down. Yesterday you did this once in a conversation with me and thought you got about half the information you needed. Let’s aim for most of the information today, since that’s what you said you’d need at work.” |
| Remind patient of what he or she did in the previous session | “Yesterday you could get back on task once. Let’s see if we can beat that today.” |
| Ask the patient to choose activity challenge level that suits him/her | “Let’s start off with a challenging activity. Which one of those activities we just discussed would you like to try first?” |
| Checking that the plan makes sense to the patient | “Before we get started, how does this sound to you?” “Does that all sound ok?” “Does that sound like a good plan?” “Does that all make sense?” “Are you on board with that plan?” |
| Ask the patient about effort level | “How difficult is this for you?” “How challenging was that for you?” |
| Link progress to goal   * Progress may be in taking first steps,effort required, completing parts of task or whole task | “Taking your first steps today (achievement) is a huge accomplishment, and will help you achieve your goal of (patient goal).”  “Yesterday that was a 4, today you said it was a 3 (effort/progress). It is getting easier for you to use this strategy, and you’re getting closer to your goal of (patient goal).” |
| Ask for feedback on progress | “How did that go for you?” “How did you feel doing that?”  “How do you think that went? What could have been done differently?” “What do you think about your progress on using this strategy?” “Was this activity similar to what you will be doing at home?” “What part of that activity was the most challenging?” |
| Follow up on patient feedback | “I know you said this was difficult. Do you feel like this is getting any easier with practice? We can make sure we work on this some more.” “Since you said you’re really worn out this afternoon, for tomorrow, would it help to schedule our sessions earlier in the day?” |
| Show progress using therapy tracker |  |
| Therapist notes/observes a perceived barrier and asks patient for more information. | “I can tell you are having difficulty (and it sounds like you do not want to continue with therapy). Can you help me understand why that is?”  “You seemed pretty upset. How are you feeling?” |
| Patient conveys emotional distress and therapist asks at least one follow-up question about it. | Patient: “I just feel sort of low today.”  Therapist: “I’m sorry to hear that. What’s going on?” |
| Emotional distress conveyed/patient appears frustrated with activity and therapist acknowledges this (i.e., uses a reflection). | “I can sense that you aren’t feeling too interested in therapy right now.”  “It must be pretty tough to be off work for so long.” “It sounds like you’re worried that you might never get back to full-time.”  “It’s no wonder you’re feeling frustrated, learning to use these strategies for the first time is really hard.” |

**Ingredients for Skill and Habit (S) targets from the RTSS Manual:**

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| Ingredient | Examples |
| Instructions (spoken, written, gesture, graphic) | Handout with written instructions |
| Cue (spoken, written, gesture, graphic, tactile) | Point to section of calendar to enter data |
| Prompt | “Let’s get started” |
| Encouraging feedback | “You’re working really hard at this.” |
| Corrective feedback | “Looks like you did two lines rather than one at a time.” |
| Evaluative feedback | “That was 80% correct.” |
| Request for repetition | “Let’s try that 5 times.” |
| Modeling | “I’d do it this way” (then demonstrate) |
| Comparison to target (to increase skill) | “Let’s compare how you just did to what you said you’d need for work.” |
| Objects | Smart phone, smart pen, chart for tracking repetitions, mirror for feedback, timer/counter, readiness ruler handouts, ICF diagram |
| Opportunities for practice | Allocate 10 minutes of each session for repeated practice using a strategy |
| Error-control methods | Spaced retrieval, vanishing cues |
| Imagery (to increase skill) | “How about mentally walking through the steps in this routine, so you can see yourself doing it at home?” |

**References**

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