### STUDY CALENDAR AND PLAN

The following is a sample of the first 5 weeks of a 21-week study plan, which can be found in Chapter 2 of *NCS Exam:* 115 Case-Based Questions, Explanations, and Study Plan (2025). While the plan describes day-by-day advice and guidance, keep in mind that you don't have to stick to the exact timeline shown. You may find yourself moving faster than the calendar during some topics and slower during others - even if you are not using this guide precisely, you can use it as a framework to keep you on track. Regardless of what you do, make sure to at least peruse through the "Remember To," and "Study Tips" sections of each weekly plan so you don't miss out on information specific to the 2025 exam and to learn what past test takers recommend to help.

This study plan and calendar can be used in conjunction with study courses, continuing education, and other means to prepare for the exam - it is not an "all or nothing" method. If you are using a course to prepare for the exam, you can still utilize this chapter by watching the videos within your course, followed by the checklists in this book to see if you hit all the necessary items. For example, you can watch the videos from your course on the topic of CVA, then you would jump to the Fundamental Items Checklist (Phase A) and the Clinical Items Checklist (Phase C) found at the beginning of Chapter 3 to "spot check" to make sure you don't have any gaps in knowledge. After looking up any unknown items on the checklists, you would then move on to the recommended articles. Finally, you would test your knowledge via the clinical cases (Phase D) and you would finalize your Summary Sheets (Phase E).

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
CVA Phase A	CVA Phase A Phase B					

#### **Daily Habits**

Employ "Study at Work" techniques (from Chapter 1)
Review Summary Sheets (5 minutes)
Look up items on your Look it up Later notebook (5-10 minutes)

Weekly Focus: In the first week, you'll be going through each item on the Fundamental Items Checklist (also known as Phase A) found at the beginning of chapter three, then you'll spend the last day of the week beginning the article analysis (known as Phase B). During Phase A, make sure to focus on the major vessel-specific brain regions, especially regarding the Circle of Willis. Save the details of other parts of the brain specific to other diagnoses for future chapters, as you'll have time allotted in the future for each diagnosis. For example, you should study the brain regions associated with the MCA, ACA, and PCA, but save the Lentiform Nucleus (i.e. the Globus Pallidus and Putamen) for when you are studying movement disorders such as Parkinson's Disease in Chapter 6. Also, a commonly overlooked aspect of the exam is the cardiac complications preceding and following a stroke. Keep in mind that a CVA and its associated risk factors are influenced by underlying cardiopulmonary disorders, especially when considered from the perspective of vessel health. Similarly, following a stroke, a PT practicing in neuro rehabilitation should be aware of cardiac complications influenced by - and comorbid with - the stroke itself. For example, a patient may have an ischemic stroke, but the stroke was initially caused by an embolism from a patient's underlying atrial fibrillation, hypertension, and atherosclerosis. To ignore these comorbid factors would miss a major aspect of recovery and prevention of future health conditions, both of which rehabilitation professionals are involved with. Similarly, familiarize yourself with EKG analysis and be aware of the major red flags while exercising. During Phase B, remember to follow the recommendations in Chapter One on how to analyze an article instead of simply reading it. Pick just two articles to analyze as you'll have time next week to analyze the others. We suggest you get started with the aerobic exercise articles by MacKay, Lyons and Moncion (see article list at neuropt.org, ncsprep.com, or at the beginning of Chapter Three). Remember to also start your daily habits. Do these every day until the exam.

**Remember to:** Look ahead and request time off from work. Plan for four to five full study days spread between now and the exam. We recommend about one day off per month where you can focus most of the day on studying. These study days also serve as great "catch up" days or as a safety net in case you fall behind on the schedule. These days off are optional (this study guide does not require you to do so), but at least try to take off the two workdays before the exam so that you are fresh for the test and so you can spend time reviewing. Most workplaces require advanced notice for time off, so send the request right away.

**Study Tips & Other Advice:** Set the pace. At the beginning of the studying journey, most people are excited to get started, but may be overwhelmed by the sheer amount of information to learn. During week one, you should set the pace of information acquisition. If you have extra energy to study, it is ok to go beyond what is written here, but try to keep a sustainable pace as your energy waxes and wanes throughout the weeks ahead.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
CVA	CVA	CVA	CVA	CVA	CVA	CVA
Phase B	Phase B	Phase B	Phase B	Phase C	Phase C	Phase C

Weekly Focus: For the first half of week two, you'll be finishing the remaining recommended articles for CVA (Phase B), and by the end of the week you'll shift gears to the Clinical Items Checklist (Phase C). During **Phase** B, it is time to jump into the Clinical Practice Guidelines (CPGs) and important systematic reviews. Pay particular attention to these articles as they are, by design, meant to guide neurologic practice. To form CPGs, the authors took painstaking effort to sift through the literature, separating the interventions lacking research from those that have the highest level of support. As therapists, the CPGs should guide our clinical choices and thus are the most important preparation material for the clinical decision-making part of the exam. The NCS exam is a clinically-focused exam, so while you're reading these, note the interventions with the highest level of research in your Summary Sheets. Also, add the conclusions of systematic reviews as they carry a similar weight to guide clinical practice. Of particular note in the CVA section is "Clinical Practice Guidelines to Improve Locomotor Function Following Chronic Stroke, Incomplete Spinal Cord Injury, and Brain Injury," by Hornby et al. This article is listed not only in the CVA section, but also in TBI and SCI, so it'll be a repeating theme throughout the exam. The interventions reviewed in this CPG are extremely important for clinical practice in neurology, so by knowing the highly recommended and recommended interventions described, it will have a high impact on your ability to make correct decisions throughout the exam. Not only should you know the recommended interventions, but also know intensity and duration. For intensity, memorize the heart rate range for exercise. During **Phase C**, also known as the Clinical Items Checklist (found at the beginning of Chapter Three), tackle each item one at a time in any order. If you are using other study resources such as video courses or continuing education, feel free to watch the entire section on CVA, then look back at this checklist to make sure you covered all the topics. (This book works concurrently with other study materials if you use it in this manner.)

**Remember to:** Familiarize yourself with International Classification of Function (ICF) terminology as this will be the "language" of the exam. Similarly, when looking at recommended outcome measures specific to CVA (found at neuropt.org and in the appendix of this book), make sure to note if it is measuring at the body systems, activity, or participation level. Also, a commonly overlooked aspect of this portion of the exam is the various cutoffs for gait speed. Most therapists know the cutoff score for fall risk, but keep in mind that there are less commonly known cutoffs for community ambulation and safe street crossing. There will still be allotted time next week to finish the Clinical Items Checklist, so don't feel pressure to get through every single item by the end of this week. As always, continue your daily habits even on busy days.

**Study Tips & Other Advice:** Form the right habits. Now that you are in the second week of studying, the daily habits that support your learning the most need to be solidified through daily practice. Specifically, the "Study at Work," techniques described in Chapter One, reviewing Summary Sheets, and looking up items in your Look it up Later notebook should be automatic and routine. Remember, glancing at your Summary Sheets and looking up a quick item on your Look it Up Later notebook should only take 5 minutes each, so even on your busy days, get this done. Repeat this daily. Don't break the chain!

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
CVA	CVA	CVA	CVA	CVA	CVA	CVA
Phase C	Phase C	Phase C	Phase D	Phase D	Phase D	Phase D

#### **Daily Habits:**

Employ "Study at Work" techniques (from Chapter 1)
Review Summary Sheets (5 minutes)
Look up items on your Look it up Later notebook (5-10 minutes)

**Weekly Focus:** During week three, you'll finish the Clinical Items Checklist (Phase C), then you'll test your knowledge through the case studies in Phase D. As you finish **Phase C**, your Summary Sheets should be filling up. Don't worry if they're a little unorganized at the moment, as there will be time next week to refresh the information in a way that you feel is useful. **During Phase D**, you'll have a chance to test your knowledge. There are a few ways you can approach this section; you can either take the full chapter test in its entirety, then read the explanations, or you can take it one case at a time, answering 4-5 questions followed by reading the explanations, repeating this until the end of the chapter. The first way has the advantage of seeing how you feel and act in a test-like scenario, whereas the second way has the advantage of having your reasoning fresh in your recent memory as to why you chose a particular answer. Either way is fine and it is good to try both throughout your studying journey. If you finish phase D with extra time to spare, check in with yourself to see if you need a day off or a break. If you still have energy, employ the "Don't just answer the question" advice in Chapter one, which involves picking apart every aspect of the case, the question, and the explanation.

**Remember to:** Decide if you'll be utilizing the study groups created by neuropt.org. These are not required, and only about 15% of test takers sign up for these. Study groups can be useful for a number of reasons - you can bounce ideas off of other people, share study tips, and you can balance each other's strengths and weaknesses (e.g. if one person's practice area is entirely patients with SCI, whereas another has no exposure to SCI). However, be protective of your time; Past test takers have noted that study groups can often be time-consuming and in fact be a barrier to deep intensive study. if you choose to be part of a study group, set boundaries such as deciding a common purpose, or choosing a limit on total meeting time so that you get the most out of a study group without sacrificing your own time and energy.

**Study Tips & Other Advice:** Strengthen your ability to focus through daily practice. You may feel tired or may be having difficulty maintaining focus for long periods. Keep in mind that focusing on detailed information is a skill and a "muscle" that can be strengthened just like any other. The more you practice, the more it'll become easier to focus for longer periods. Fatigue is a normal response to the sudden increase in studying you've been experiencing in the last two weeks. Unless you were reading articles every day before you began this studying journey, your eyes may be tired from the new intensity and duration of work that is needed. Be kind to yourself, take breaks, and know that as the days go on, it'll actually become easier to focus rather than harder.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
CVA	CVA	TBI	TBI	TBI	TBI	TBI
Phase E	Phase E	Phase A	Phase A	Phase A	Phase A	Phase A

#### **Daily Habits:**

Employ "Study at Work" techniques (from Chapter 1)
Review Summary Sheets (5 minutes)
Look up items on your Look it up Later notebook (5-10 minutes)

Weekly Focus: During week four, you'll be spending just one or two days on finalizing your Summary Sheets for CVA (Phase E), then you'll start Phase A of TBI as soon as possible. During Phase E of CVA, first take a look at the description in Chapter One regarding how to create and maintain a Summary Sheet. At this point, you've been filling up your Summary Sheets for the last three weeks, and they may need some reorganization. Try arranging them according to common information. Cutoff scores, vessel distribution, and intervention recommendations from articles are all logical arrangements, but choose the topics and placement according to your own preference. During Phase A, you'll begin the topic of TBI by using the Fundamental Items Checklist as a means to check for blindspots as you study. Now that you're studying brain injury, you can expand your anatomy and physiology knowledge to include other brain regions that you may not have emphasized during CVA (e.g. frontal lobe anatomy). Also include a review of nerve anatomy (e.g. axon, dendrite, etc) in the context of how nerves can be damaged during brain injuries by shearing and stretching forces. Keep in mind that it is important to not only view nerves in the context of damage, but also their ability to recover via neuroplasticity, so now is a good time to dig deep into motor learning and how the brain adapts after an injury. Make sure you know the factors that drive neuroplasticity (e.g. repetition, salience, etc) and what you can do in rehab to drive this. The questions on the NCS exam may not directly ask about factors that drive neuroplasticity but many will ask about how you can alter exercises to maximize this process. Knowing the underlying drivers will make those easy answers for you.

**Remember to:** Take a "birds eye" view of the full study calendar from today up to the expected exam date so that you can see not only where you are, but also where you are going. Note that there is time allotted for each major topic as well as "catch up" days in case you fall behind.

**Study Tips & Other Advice:** As you go through this week, take a moment to reflect on if you feel ready to shift from CVA to TBI. If you feel hesitant, ask yourself why - is it because you feel you're missing some information? Is it because you're worried that a few months from now you won't remember all of the information you just learned? It's natural to think this about the very first topic because it is the topic that is furthest in time from the exam. If you're worried you'll forget something in particular, just add it to the Summary Sheets. You'll be reviewing these sheets every day, so your worry may dissipate as time goes on. On the other hand, if you feel like you don't know key information, you can either spend another day looking up the missing information before moving on to TBI, or just note it now on the Look it up Later sheet and make sure to address it on a "catch up" day or on another day where you are ahead. Don't rely on this as a first choice as you never know what unforeseen challenges may be in your work or home life, so only utilize this sparingly to allow yourself to move forward.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
TBI	TBI	TBI	TBI	TBI	TBI	TBI
Phase B	Phase B	Phase B	Phase C	Phase C	Phase C	Phase C

### **Daily Habits:**

Employ "Study at Work" techniques (from Chapter 1)
Review Summary Sheets (5 minutes)
Look up items on your Look it up Later notebook (5-10 minutes)

Weekly Focus: During week five, you'll be beginning the week in article review (Phase B) and ending the week working through the Clinical Items Checklist (Phase C). During Phase B, you'll notice a familiar article listed, "Clinical Practice Guidelines to improve locomotor function following chronic stroke, incomplete spinal cord injury, and brain injury by Hornby et al," so it is up to you if you want to review that one again. You also likely already added the summary recommendations of this CPG to your Summary Sheets, so it makes sense to instead spend your time on the other articles. The systematic review on exercise and cognition by Tefertiller is of particular importance for neurologic therapists treating patients with brain injury. Regarding concussion, take a brief look at the "Exercise is Medicine for Concussion," but don't focus too heavily on it. The author is well known for encouraging the medical community to prescribe aerobic exercise for patients after a concussion, and that is certainly important, but keep in mind that the rehabilitation community has been exercising patients with brain injuries for decades before his publications. His article is a good overview, but the next article, "Physical Therapy Evaluation and Treatment After Concussion/Mild Traumatic Brain Injury," by Quatman-Yates is exceptional for rehabilitation professionals and is directly applicable to neurologic practice. The information within this article will likely show up as questions on the NCS exam. During Phase C, of particular importance are the three scales of recovery in patients with TBI: 1) The Stages of Coma Recovery, 2) The Ranchos Los Amigos Scale of Cognitive Functioning-Revised, and 3) The Glasgow Coma Scale. These scales should be on your Summary Sheets as well as what makes a distinction between stages. For example, in the Ranchos Los Amigos Scale of Cognitive Functioning-Revised, you should know what distinguishes Localized Response (III) from Confused/Agitated (IV). You should also know how to change your interaction with the patient based on the different stages. There is a large amount of information to learn in this phase, so make sure to jot it down on your Summary Sheets. With enough repetition, you'll learn it. Also, keep in mind you'll have a few days next week to continue working on these items as well.

**Study Tips & Other Advice:** Utilize free resources. There are many great resources available for free at neuropt.org and ncsprep.com to supplement your studying, but to highlight one in particular, the neurology fact sheets can provide succinct information on each of the major diagnoses on the NCS exam, including Brain Injury, SCI, CVA, and Vestibular.

Here is the sheet on Brain Injury: https://www.neuropt.org/special-interest-groups/brain-injury/fact-sheets

~The full 21-week study plan can be found in the preparation book NCS Exam: 115 Case-Based Questions, Explanations, and Study Plan (2025), which is available at NCSPrep.com and Amazon.com~