

**INTERACTIVE METRONOME® ONDEMAND  
CERTIFICATION & COACHING**

# **MODULE 7**

**IM TRAINING - PHASE FOUR**



# MODULE 7

## IM TRAINING - PHASE FOUR



### GATHER NEEDED EQUIPMENT & MATERIALS

### LEARNING OBJECTIVES:

- Phases 1, 2 & 3 Review
- IM Training: Phase 4

### LOG YOUR ACTIVITY TIME HERE!

In each Module evaluation, you will be asked to log the amount of time it takes you to complete each course activity. This information will be used to ensure that the course CEUs have been calculated accurately. Please use this space provided to log your start time.

VIDEO START TIME

\_\_\_\_\_ AM/PM

ESTIMATED TOTAL TIME FOR THIS ACTIVITY IS 39 MINUTES

You will need the following to complete **Module 7**:

- **Additional therapeutic tools from your clinic/school (items of your choice to incorporate along with IM for custom exercises that you create based upon your client's therapy/academic goals)**
- Computer with good internet connection
- IM equipment (set up, connected to computer and ready to use)
- IM software (open software on your computer)
- IM training file (open your IM file) then minimize the IM software so you can begin the next module.
- Pencil to take notes

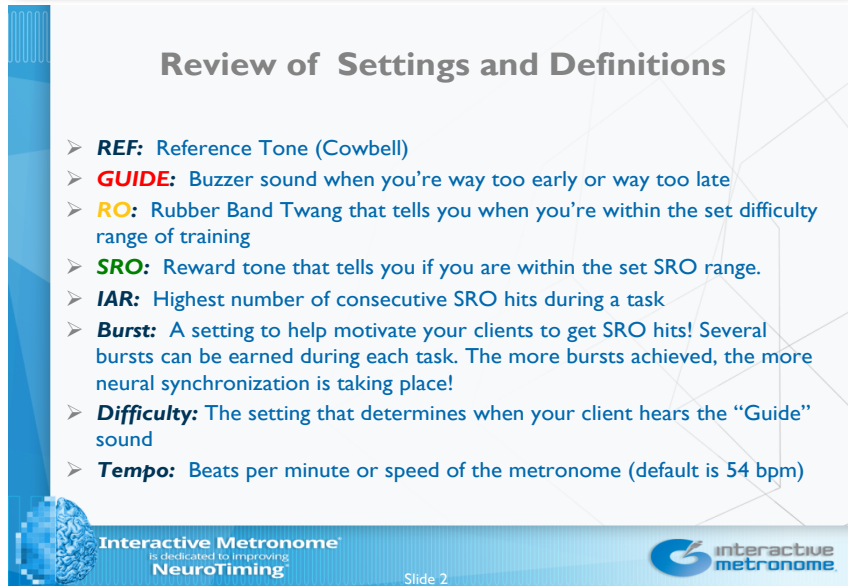
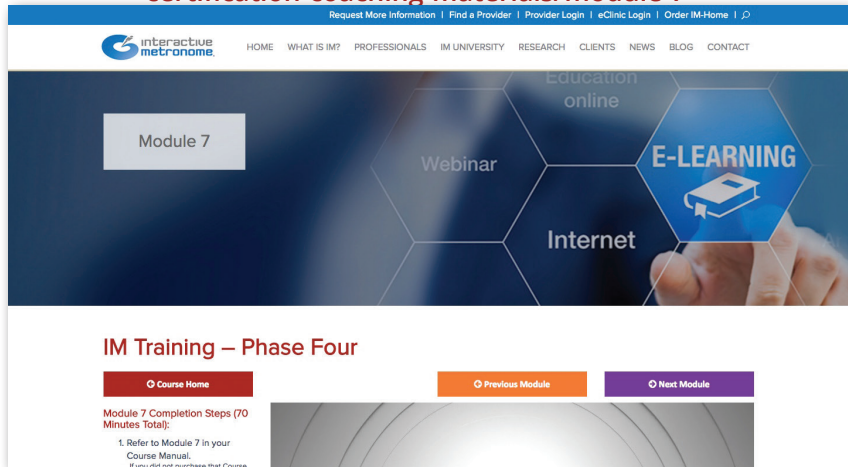


### WATCH THE VIDEO

39 minutes

Access the Module video here:

<https://www.interactivemetronome.com/im-ondemand-certification-coaching-materials/module-7>



### 4 Phases of IM Training

Phases 1-2	Learn IM Ref Tone & Guide Sounds
Phases 3-4	Improve Timing & Rhythm

**Note:** Phases are not applicable for total hands-on training (i.e., with infants, low functioning clients).

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### IM Training: PHASE 4

#### GENERALIZE TIMING SKILLS

Goal: Introduce the other IM exercises (4-13) and custom exercises to improve timing in the rest of the body and for specific communication, language, cognitive, or motor functions.

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### IM Training: PHASE 4

For SLP, AUD, OT, PSYCH, EDUC, CHIRO, PHYSICIAN

#### ➤ To address speech, language, cognition, literacy, and academic performance...

- ◆ Adjust SRO range to I5
- ◆ Adjust Difficulty from 100 to 50, then to AUTO to improve timing further
- ◆ Aim for higher number of bursts and SRO hits
- ◆ Increase duration of Both Hands exercise to work on sustained attention/concentration (up to 30 consecutive minutes)
- ◆ Begin working on exercises 4-12 to improve timing in lower extremities & bilaterally – important to achieve outcomes

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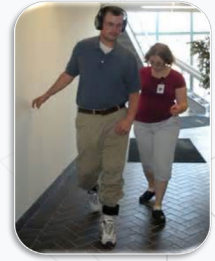


# IM Training: PHASE 4

For OT, PT, ATC, CMT, PHYSICIAN, CHIRO

## ➤ To address coordination, gait, balance & functional mobility...

- ◆ Lower extremity exercises 4-13
- ◆ In-Motion Trigger for gait training (feedback for cadence, step length, heel strike every step)
- ◆ Custom exercises to address specific skills (i.e., balance with head-turns, vestibular rehab, stair-climbing, etc..)



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## Phase 4 TRAINING EXAMPLES



Phase 4  
Generalizing Timing Skills to the Lower Extremities



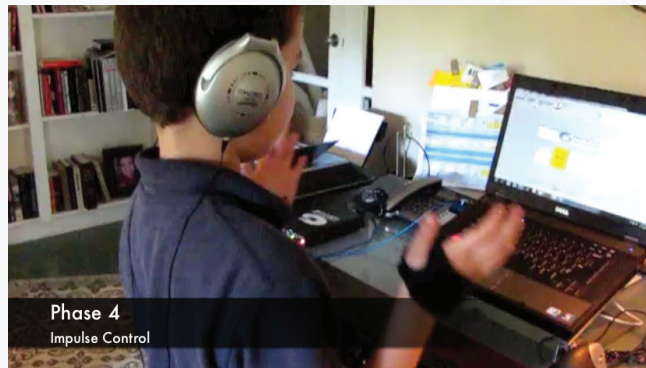
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## PHASE 4: CUSTOM EXERCISES

### Improving Impulse Control with Slower Tempo



Phase 4  
Impulse Control



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### PHASE 4: CUSTOM EXERCISES

Improving Attention Shifting, Response Inhibition, Working Memory



Phase 4  
Cognitive Rehabilitation



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### PHASE 4: CUSTOM EXERCISES

Improving Self-Regulation, Sequencing & Crossing Midline  
Watch his progression over time...



Phase 4  
Sequencing & Crossing Midline



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### PHASE 4: CUSTOM EXERCISES

Improving Sensory Integration



Phase 4  
Sensory Integration



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### PHASE 4: CUSTOM EXERCISES

#### Improving Speech Fluency



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### PHASE 4: CUSTOM EXERCISES

#### Improving Handwriting



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### PHASE 4: CUSTOM EXERCISES

#### Improving Balance & Gait with IM In-Motion Trigger (inside the shoe)

Watch as he progresses over time...



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## PHASE 4: CUSTOM EXERCISES

### Work Hardening



Phase 4  
Occupational Rehabilitation



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## PHASE 4: CUSTOM EXERCISES

### Facilitating Ortho & Neuro Motor Rehabilitation



Phase 4  
Ortho/Neuro Rehabilitation



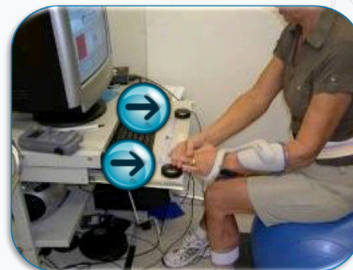
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## PHASE 4: CUSTOM EXERCISES

### Incorporating feedback for millisecond timing with Bioness



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## PHASE 4: CUSTOM EXERCISES

### Peak Performance, Athletics



Phase 4  
Rapid Processing, Execution & Agility for Athletes



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## Counteracting Timing Tendency

- **Counteract** = do the opposite of what you are currently doing
- If too fast, purposefully slow down a little.
- If too slow, purposefully speed up a little.
- Facilitates successful training
- Encourages meta-thinking & impulse control
- Counteracting timing tendency may be contraindicated & counterproductive for individuals with impaired motor planning & sequencing



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### PHASE 4 LAB: GENERALIZE TIMING TO LOWER EXTREMITIES

#### SELECT:

- Regular Training
- Both Toes
- 1 minute
- Tempo 54 (default)
- **SELECT Difficulty\***
- **SELECT SRO\***
- **SELECT Burst threshold\***
- Guide sounds ON ✓
- **SELECT Auditory or Training Visuals\***



**POP QUIZ:** Under what circumstances would you change the IM settings (tempo, difficulty, SRO etc.) when beginning the lower extremity & bilateral exercises? Why?



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**PHASE 4 LAB:  
IMPROVE ATTENTION &  
PROCESSING WITH AUTO DIFFICULTY**

**SELECT:**

- Regular Training
- Both Hands
- 1 minute
- Tempo 54
- Difficulty AUTO ✓
- SRO 15
- Burst threshold 5
- Guide sounds ON ✓
- Visual Indicator Selection: Enriched Score without Center Flash\*
- Background: Select a stationary background (shown in white font)



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**PHASE 4 LAB:  
CREATE A CUSTOM EXERCISE**

**SELECT:**

- Regular Training
- CREATE A CUSTOM EXERCISE
- 1 minute
- Tempo: CHOOSE
- Difficulty: CHOOSE
- SRO: CHOOSE
- Guide sounds: ON OR OFF?
- CHOOSE Auditory or Visual Training?

**YOU MAY USE ANYTHING FROM THE TOOL BOX.  
HAVE FUN!**



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**COMPLETE THE  
ADDITIONAL READING**  
25 minutes



**CONTINUE TO IMPROVE TIMING WITH HANDS**

Now that your client has demonstrated steady improvement with the hands (or intact hand if you are working with a client with affected function on one side), he will continue to work on hand exercises in Phase 4 with the purpose of improving focus and fine motor control.

In Phase 4, you will make further adjustments in the following settings for the hand exercises (Both Hands, Right Hand, Left Hand):

- **BURST THRESHOLD** - You may have previously adjusted the Burst Threshold to make it possible for your client to achieve Bursts by lowering it from the Default setting of 4 (see image below). By setting

LOG YOUR ACTIVITY TIME HERE!

VIDEO END TIME \_\_\_\_\_ AM/PM

TOTAL ACTIVITY TIME  
(IN MINUTES) \_\_\_\_\_ MIN.

ESTIMATED TOTAL TIME FOR THIS  
ACTIVITY IS 39 MINUTES

LOG YOUR ACTIVITY TIME HERE!

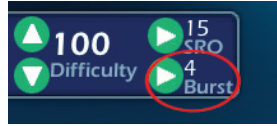
READING START TIME

\_\_\_\_\_ AM/PM

ESTIMATED TOTAL TIME FOR THIS  
ACTIVITY IS 25 MINUTES

# NOTES

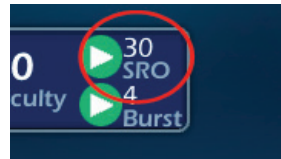
the Burst Threshold at 2 or 3, your client only had to hit 2 or 3 consecutive times in the 0-15 ms SRO range to earn a burst. By adjusting the Burst Threshold a little higher (i.e., 4 or more) for hand exercise(s), your client will need to make even more consecutive SRO hits to earn bursts. This facilitates focus and fine motor skills.



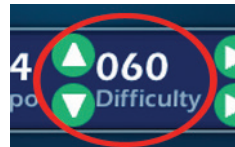
To determine a realistic Burst Threshold setting, you should observe your client's performance during the hand exercise(s). How easy is it for your client to earn Bursts? How many Bursts is he earning? What is his IAR (In-A-Row) score? (see image below) Set the Burst Threshold at a level you think your client can achieve based upon these attributes. For example, if your client fairly easily achieves bursts (Bursts=45, IAR=8) when the Burst Threshold is set at 4, then you may wish to increase the Burst Threshold to 5 or 6.



- **SRO RANGE** - Progressively adjust the SRO back to the default setting of 15 as your client performs well.



- **DIFFICULTY** - Once your client is performing well at the default Difficulty setting of 100, make it even more challenging by lowering it to 50 and then to AUTO Difficulty.



AUTO Difficulty is the most challenging setting for focus and fine motor coordination. You will know your client is ready for AUTO Difficulty if he is able to quickly and successfully process and adjust his timing and rhythm in response to the guide sounds when the Difficulty is set at 50.

When AUTO Difficulty is turned on, the Difficulty automatically adjusts itself to your client's best Task Average, so your client may hear a buzzer when he hits the trigger at 23 ms from the beat! This means he will hear the buzzer A LOT when AUTO Difficulty is selected. This is a good thing and helps to improve cognitive and fine motor skills. When you transition a client to AUTO Difficulty, prepare him by letting him know that he is doing very well and is ready for the next challenge. Tell him he will hear the buzzer much more when AUTO Difficulty is turned on, even though he is performing very well. At this point, he will be used to hearing the more rewarding guide sounds, so this warning will prevent him from becoming overly alarmed.



In the above image, AUTO Difficulty has been turned on. The Difficulty setting automatically adjusts to this person's best Task Average MS score. In this case, that score is 30ms. Each time this person hits at 30ms or more from the reference beat, he will hear a buzzer (Guide). This more intense level of feedback will accelerate improvement in timing and rhythm.

## IMPROVE SUSTAINED ATTENTION

Progressively increase the duration of the Both Hands exercise as your client demonstrates readiness. Keep function in mind when setting the duration. For example, a 3rd grader needs to focus for 15 minutes at a time before a break is given. An adult must focus for at least an hour at a time uninterrupted.

**NOTE:** *When increasing the time on an exercise to 60 minutes to address sustained attention, this one exercise will take up the entire training session. You may wish to work on this goal every other training session to allow you to address other goals with IM training such as working on the lower extremity exercises.*

## IMPROVE TIMING IN LOWER EXTREMITIES

The lower extremity exercises are listed here in order from easiest to most challenging. It is a good idea to introduce them in this order:

- 4-Both toes
- 5-Right toe
- 6-Left toe
- 7-Both heels
- 8-Right heel
- 9-Left heel
- 10-Right hand/Left toe
- 11-Left hand/Right toe
- 12-Balance right foot/Tap left toe
- 13-Balance left foot/Tap right toe

Adjust the following settings if needed for the lower extremity exercises:

- **GUIDE SOUNDS** – You may wish to temporarily turn off the guide sounds as you introduce lower extremity exercises. Be sure to turn them back on, however, at the soonest possible opportunity because feedback for timing is essential for improving synchronization.
- **DIFFICULTY** – While your client may be performing the hand exercises with a more challenging Difficulty setting at this time (i.e., less than 100 or Auto Diff), he may require an easier Difficulty setting for the lower extremity exercises until he demonstrates improvement in timing & rhythm. So, the Difficulty setting for hands may differ from the Difficulty setting for feet for a while!
- **SRO RANGE** – It may also be appropriate to adjust the SRO Range to a higher number for lower extremities.
- **TRAINING VISUALS** – The Training Visuals and Games may be distracting for some individuals when performing the lower extremity exercises, even though they were

## NOTES

helpful during completion of the Hand exercises. It is worth trialing lower extremity exercises with and without the Training Visuals to see which elicits best performance (i.e., lowest Task Average MS scores).

**NOTE:** *You may feel the need to stop here and think that doing anything with the LOWER extremities is not within your scope of practice. However, timing throughout the body is directly linked to how well your client is utilizing his cognitive resources, especially in situations where motor coordination/praxis is affected. Regardless of your professional discipline, it is important for your client to improve timing throughout the body in order to free up cognitive resources that are devoted to motor skills to improve attention, cognitive speed, working memory, and executive. Only qualified professionals (i.e., physical therapists) should proceed beyond the basic 13 IM exercises to address more specific skills like gait.*

## MODIFICATIONS FOR DYSPRAXIA

### LOWER EXTREMITY EXERCISES

If you've observed any difficulty with sequencing the feet on either Both Toes or Both Heels on the LFA or during IM Training, try the following strategies to remediate the problem:

- **WORK ON TOE EXERCISES FIRST** - Toes are easier than the other lower extremity exercises, so work on these first before progressing to the others.
- **TURN OFF THE GUIDE SOUNDS** - The feedback of the guide sounds will force your client to THINK about how he is moving and make corrections. This will create further problems for a client who has dyspraxia.
- **AVOID THE TRAINING VISUALS FOR NOW** - Do not use the Training Visuals as this is another form of feedback that may interfere with performance (of course, there are always exceptions so if you feel it may help you can always try it with the Difficulty adjusted to the easiest setting 300).
- **ADJUST THE TEMPO** - Your client may be able to perform the Toe exercises at the Default tempo of 54 bpm. If he struggles to control the rate and rhythm of tapping his toe or struggles at all with smoothly sequencing the feet during Both Toes, then you may wish to reduce the tempo slightly to 48-52 bpm.

If you slow the tempo down too much, it is harder for your client to perform because he must ANTICIPATE a longer time interval between beats, causing him to THINK about his movement. Your goal should be to find the just right tempo where he can move as automatically as possible with the least amount of cognitive effort.

- **INCREASE THE REPETITIONS** - Once you have found the right tempo, set the repetitions at a substantial level for each exercise (i.e., 5-10 minutes) as tolerated.
- **PROVIDE A MODEL** - Your client may benefit from watching you and copying you as you do the exercise. If this level of cueing is necessary, set up the training environment so that you are also wearing a set of headphones. You will perform the Toe exercises while standing next to your client. You will not hit the tap mat, only your client will so that you can record his data. You will tap your foot on the floor in sync with the reference tone while your client copies you (his toe hitting the tap mat).
- **ENCOURAGE RHYTHM** - When performing either the Right Toe or the Left Toe exercise, encourage your client to move his hips back and forth so that he rocks onto and off of the tap mat with his toe propped over it. If he has difficulty with his timing, encourage him to rock forward on one beat and back on the next. In this manner, he will activate the tap mat every other beat instead of on every beat. This will teach him an on/off rhythm.

You may need to model the rocking motion, or you may need to provide hands-on assistance to help him achieve this rocking motion which will help improve his sense of timing and rhythm and his motor planning and sequencing skills. Look for opportunities to wean from your physical assistance and modeling. Step back in and provide assistance as needed, allowing him more independence as he improves. Remember, once you get

the right tempo and rhythm going, aim for HIGH repetitions on each exercise! In cases of mild-moderate dyspraxia, you will see motor movements become more fluid during the exercise and will notice your client is able to make more minute changes in timing to get closer to the beat. How exciting this is to watch!!

- **INTRODUCE THE OTHER EXERCISES AS IMPROVEMENT IS DEMONSTRATED WITH TOES** - As Toes improve, you will then introduce the other lower extremity exercises, including Heels, Bilateral, and Balance. Heels may be more difficult than Toes. You may need to adjust the tempo again when working on heels. Again, once you establish the right tempo, push for high repetitions.
- **OBSERVE PERFORMANCE AND SCORES TO KNOW WHEN TO MAKE FURTHER ADJUSTMENTS TO FACILITATE MOTOR PLANNING AND SEQUENCING, TIMING, AND RHYTHM** - Watch your client's performance on the computer screen during each exercise. As motor planning and sequencing (praxis) improves, you will see your client's scores bounce around a lot less (decreased variability/increased rhythm), millisecond scores for each hit will remain in a tighter range, and your client will begin to make smaller adjustments in timing to get closer to SRO. He will begin earning Bursts. This is very fun to watch! It has even been observed in adults with life-long dyspraxia and those with acquired brain injury after years of chronic impairment! (One adult reported he was able to line-dance for the first time in his life after he completed IM training). The just-right tempo and high repetitions are key ingredients for success!

For more severe dyscoordination, you may wish to employ these additional modifications:

- **MODIFY FOOT EXERCISES** - As you introduce the individual Toe exercises, modify the manner in which your client hits the tap mat with his foot. Rather than having him tap the mat with his toe, have him step forward with the foot onto the mat on one beat, then back off of the mat on the next beat, and so on. For example, if performing the Right Toe exercise, your client will stand with the tap mat in front of him on the floor. He will step forward onto the tap mat with this Right Foot on one beat, then back off and onto the carpet with this Right Foot, then back onto the tap mat again with his Right Foot, then back off onto the carpet with this Right Foot.

Your client will activate the tap mat in this manner every other beat. This will help teach him timing, rhythm, motor planning and sequencing. Stepping is a more automatic movement than tapping. When tapping the foot, we have to think about the pace of our tapping and regulate it during IM. However, stepping forward is akin to walking, something we do without really thinking about it. Your goal here should be to get your client STEPPING onto/off the tap mat at the just right tempo for many repetitions.

As your client gets better at sequencing the stepping movements with the individual Toe exercises, you will notice that he begins to start stepping more fluidly and hitting the tap mat more ahead of the beat than he had previously (as if the tempo is now too slow for him). This is a sign that his motor planning and sequencing are improving. When you see this happen, adjust the exercise so that he is performing at the same tempo but stepping forward onto the tap mat on every beat (rather than every other beat). For example, if your client is working on the Left Toe. He will now STEP forward with the Left Foot onto the tap mat on the beat then immediately back onto the carpet, then STEP forward again on the next beat onto the tap mat, etc. Adjust the tempo if needed so that he can accomplish this easier.

As your client improves the timing of his stepping motions with the individual Toe exercises when hitting the tap mat every beat, progress to where he is now stabilizing his heel on the floor with his toe propped over the tap mat, TAPPING his toe on the tap mat every OTHER beat. He will bring his toe down on one beat and up on the next beat. Encourage rhythmic swaying of the hips as he rocks his body and foot onto the tap mat on one beat, then brings his toe back up on the next beat, then back down on the tap mat on the next beat, and so on.

As he gets better with tapping every other beat, then progress to where he taps on EVERY beat. All the while, monitor the tempo and adjust it as he performs better. If the tempo seems too slow for him at any point, increase it slightly (i.e., 2 bpm, going from 48 to 50bpm). Aim for HIGH repetitions. You will see his timing improve on the computer screen, and you will notice increased rhythm as you watch him.

- **INTRODUCE BILATERAL AND BOTH TOE EXERCISES ONCE INDIVIDUAL TOE EXERCISES ARE IMPROVING** - Bilateral exercises (Right Hand/Left Toe and Left Toe/Right Hand) can be introduced at this point with adjustment in the tempo. You should provide a model for your client to copy as needed.

You should also introduce Both Toes. When introducing this exercise, you will again need to adjust the tempo to a slower pace (between 40-50 bpm). It is harder to sequence movements when both sides of the brain must work in concert. You may need to model this exercise for your client while he copies you over many repetitions. As he improves, you will need to wean from your model and only jump in and help as needed. Verbal cues are not going to be very effective. A visual model to copy (with no talking) is far more effective. When you model the exercise, you will need to wear a set of headphones in order to synchronize with the beat. Timing matters!!! The better your own timing skills are, the more effective your model will be.

- **INTRODUCE HEEL EXERCISES ONCE BOTH TOES EXERCISE IS IMPROVING** - Once Both Toes are steadily improving, progress to Heels. Follow the same plan to work on Heels, focusing on individual heels first with the same modifications (stepping back onto the trigger, hitting every other beat, etc as described above). Once individual heels are steadily improving, proceed to Both Heels, adjusting IM settings as needed and modeling as needed.
- **PROGRESSIVELY ADJUST TEMPO TOWARD 54 BPM AND TURN ON THE GUIDE SOUNDS** - Once your client is sequencing the movements better for the foot exercises, you should progressively adjust the tempo toward the Default setting of 54 bpm to encourage further improvement in motor planning and sequencing. You should also turn on the guide sounds when you think your client is ready. Be sure to adjust Difficulty so that you are not providing TOO much feedback and then gradually make the Difficulty more challenging so that more feedback is provided (i.e., more buzzer) to nudge your client toward SRO hits and better motor control and coordination.

## MODIFICATIONS FOR HEMIPLEGIA UPPER EXTREMITY EXERCISES

After improving timing and rhythm with the more intact upper extremity in Phases 1-3, the client with hemiplegia should now start working on improving synchronization with the affected upper extremity in Phase 4.

Here are some suggestions for training the affected extremity:

- **PERFORM A SHORT EXERCISE WITH THE INTACT HAND TO START THE TRAINING SESSION** – A short hand exercise with the intact hand will get your client ready to focus and prime him for working on his affected hand. When working on this exercise, remember to adjust Difficulty, Burst Threshold, SRO Range, and Repetitions to facilitate improvement in cognitive and motor skills.
- **REDUCE THE TEMPO FOR THE AFFECTED HAND** - Reduce the tempo to a pace that allows your client to move the affected arm/hand as rhythmically as possible. The tempo may need to be considerably slower than that of the intact hand. As motor control and coordination improve, the tempo should gradually be increased. (It is okay for you to use a different tempo for each hand and is often necessary!)

- **TURN OFF GUIDE SOUNDS FOR BOTH HANDS AND THE AFFECTED HAND** - You may wish to turn off the guide sounds temporarily or adjust the Difficulty level to an easier setting if your client is receiving too much buzzer (Guide) feedback. As he improves, you may wish to either turn on the guide sounds or adjust the Difficulty to slightly more challenging settings to nudge him closer to SRO.
- **KEEP REPETITIONS SHORT FOR BOTH HANDS AND THE AFFECTED HAND** - Adjust the number of repetitions for the affected hand and Both Hands to a level that your client can achieve. Your client may not be able to perform as many repetitions with the affected side as compared to the intact side. Work on increasing repetitions gradually – repetitions are a key factor in improving motor function in the affected extremity.
- **PERFORM EXERCISES WITH BOTH HANDS AND THE AFFECTED HAND** - As your client performs these exercises, encourage him to make circular, rhythmical movements with the affected arm/hand to the best of his ability (a slower tempo will facilitate this). During Both Hands, encourage him to bring his hand to midline to meet the intact hand. A mirror can sometimes be helpful (if not too distracting or contraindicated due to impaired praxis). Provide hands-on assistance to facilitate smooth, rhythmical movement as needed for neuromuscular re-education of the affected arm/hand.

Monitor your client for increased pain or spasticity in the affected extremity. Stop the exercise if there is pain or increased muscle tone. (Qualified professionals, such as Occupational and Physical Therapists, may implement therapeutic strategies for pain and tone management during IM training).

- **PERFORM REPETITIVE MOTION ACTIVITIES FOR FUNCTIONAL TASKS/ADLS IMMEDIATELY FOLLOWING IM TRAINING** - Repetitive motion activities should follow IM training to promote functional use of the affected extremity. It is also possible, and many times a more efficient use of time, to combine IM training with functional movements.

## LOWER EXTREMITY EXERCISES

Here are some strategies to facilitate successful IM training of the lower extremities for individuals with hemiplegia:

- **SEATED FOR EXERCISES INITIALLY** - Your client may need to be seated initially for foot exercises. If standing balance is poor, you may wish to progress from sitting on a stable surface (chair), to a less stable surface (exercise ball – with gait belt and assist for safety as needed), to standing while holding onto a surface for balance (like an assistive device or chair), to standing with contact guard (using a gait belt for safety), to progressively more independent standing.
- **BEGIN WITH EXERCISES FOR THE INTACT LOWER EXTREMITY** – Just as you taught your client good timing with the more intact upper extremity before introducing exercises for the affected side, you will first introduce the lower extremity exercises to the more intact lower extremity. It is easier for your client to learn good timing by structuring the session this way. So for the time being, your client will perform the following exercises (with adjustments to IM settings as deemed appropriate):
  1. Hand exercise with intact hand (warm up)
  2. Hand exercise with affected hand
  3. Both hands
  4. Right or Left Toe (choose the more intact extremity for this exercise)

For the intact lower extremity, you will likely be working at a Tempo of 54 bpm and with the guide sounds on. Of course, adjust Difficulty and other settings as needed to facilitate a positive training experience.

If your client struggles with timing in the intact lower extremity, he may tap his intact hand on that leg while simultaneously tapping that leg on the tap mat to the beat to improve timing & rhythm. Alternatively, you may provide hands-on assistance. Sometimes having your client move the foot forward onto the tap mat on one beat and back off the tap mat on the next beat instead of tapping the foot on the trigger helps. When doing so, your client will hit the tap mat every other beat. Once you see improvement in timing with this approach, transition back to tapping the toe on the tap mat. Whatever modifications or assistance you provide, gradually wean from it to promote more independent and timed movement at the default tempo of 54 bpm.

- **TRANSITION TO INCLUDE EXERCISES FOR THE AFFECTED LOWER EXTREMITY** - As your client demonstrates improvement in timing & rhythm with the intact lower extremity, introduce exercises for the affected lower extremity. Adapt the IM settings and your approach to IM training as needed for each individual. For example, dorsiflexion may be impaired so that your client cannot raise and lower his foot onto the tap mat. In this instance, you may wish to place the tap mat on a wedge, and position the wedge under the affected foot so that your client can more easily tap it. Alternatively, your client may use a stepping motion to hit on the trigger, moving his whole foot forward onto the tap mat on one beat and then back off on the next beat (hitting the tap mat every other beat). Other suggestions for modifying the IM settings include the following:
  - **ADJUST THE TEMPO FOR THE AFFECTED LOWER EXTREMITY** - You most certainly will need to adjust the Tempo to a slower setting for the affected lower extremity. It may take a bit of trial and error to find the just-right tempo where your client can achieve his best performance.
  - **TURN OFF GUIDE SOUNDS TEMPORARILY** - When first introducing lower extremity exercises to the affected side, you may wish to turn off the guide sounds for those specific exercises. So, the guide sounds will be turned on for all but the lower extremity exercises on the affected side. As your client demonstrates readiness, turn the guide sounds back on for these exercises.
  - **ADJUST DIFFICULTY** - If you elect to keep the guide sounds turned on for the affected lower extremity exercises, adjusting the Difficulty will be important so that your client does not hear the very early/very late buzzer (Guide) too frequently and become discouraged. Use the chart below to adjust the Difficulty for a more positive training experience.

<u>Client's Millisecond Average:</u>	<u>Adjust Difficulty Setting to:</u>
More than 300 ms	300 (highest)
200 ms	300 (add 100)
150 ms	250 (add 100)
100 ms	150 (add 50)
50 ms	100 (add 50)
Less than 25 ms	Auto (most challenging)

- **ADJUST SRO RANGE** - Along with adjusting the Difficulty, adjusting the SRO Range will make it easier for your client to experience success at synchronizing with the beat and earning SRO hits & Bursts. The more success your client experiences, the more likely his is to progress.
- **INTRODUCE TRAINING VISUALS** - If your client is struggling to synchronize with the auditory Reference Tone and you think visual cues may be helpful, you may wish to introduce the Training Visuals. It is a good idea to begin with the least distracting default background, and avoid the Games initially as they may be too distracting.



## ADDRESS SELECTIVE ATTENTION & MULTITASKING

As your client becomes more proficient in a quiet, non-distracting environment, he will benefit from training with distractions and background noise. You may wish to open the door to the training room to allow in ambient noise. Next, you might want to introduce talk radio or you may read aloud while your client performs a hand exercise. Then you may read a story and ask your client questions about the content or have 2-way dialogue with your client as he performs the exercise. If you are using the Training Visuals or Games, you may wish to turn on the volume for background noise. In any case, you will want to make behavioral observations and watch your client's scores in order to grade the level of distraction/background noise in order to facilitate progress.

The In-Motion trigger may be used by all disciplines to address multi-tasking and selective attention. When wearing the In-Motion Trigger, your client will receive feedback about timing for each step as he walks around amidst the milieu of other people, sounds, and sights or while performing custom exercises.



**TAKE THE ONLINE POST-TEST & EVALUATION FOR MODULE 7**

5 minutes

To view the course materials for this Module visit:

<https://www.interactivemetronome.com/im-ondemand-certification-coaching-materials/module-7>



### CONTACT US WITH ANY QUESTIONS

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**LOG YOUR ACTIVITY TIME HERE!**

**READING END TIME**  
\_\_\_\_\_ AM/PM

**TOTAL ACTIVITY TIME (IN MINUTES)**  
\_\_\_\_\_ MIN.

**ESTIMATED TOTAL TIME FOR THIS ACTIVITY IS 25 MINUTES**

**DON'T FORGET TO REFERENCE YOUR NOTES FOR THE TIME LOGGED ACTIVITIES IN THIS MODULE, WHICH WILL BE ASKED IN THE EVALUATION.**