SUPPLEMENTAL MATERIAL

Supplementary Table I: TIDIER checklist

TIDieR Criteria	Control intervention	Experimental intervention
Item 1: Brief name or phrase that describes the intervention.	Handout of exercises	InTENSE evidence-based motor training program
Item 2: Rationale, theory, or goal of the elements essential to the intervention	One model of care in Australia is to provide a handout of potential exercises along with advice to practice exercises for the weeks following injection. Without funding for allied health services, most clinics provide handouts and advice to the participants with stroke post-injection to encourage motor training following botulinum toxin injections. In this pragmatic research design, provision of a handout is therefore an appropriate reference standard.	To deliver the motor training program to the participants with stroke post-injection, a model of therapy delivery was used to transfer the responsibility of rehabilitation to participants over the 12-week program. The intensive upper limb rehabilitation program is evidence-based and included 2 weeks of serial casting aimed at decreasing any contracture, followed by 10 weeks of movement training, aimed at decreasing weakness and improving movement based on movement science approach to improving motor control after stroke.
Item 3: What (Materials): any physical or informational materials used in the intervention, including those provided to participants or used in intervention delivery or in training of intervention providers.	1) a picture-rich and easy-to-understand two-page handout. *Handout materials can be accessed from the first author.*	1) A standardized treatment manual describing the detailed therapy exercises. For each activity, the manual includes instructions, a photograph of the exercise, and examples of how to set up to practice each exercise. Levels included Level 0 (electrical stimulation program), and the previously published Levels 1-3 GRASP. 2) Casting materials, including synthetic casting tape, undercast padding and stockinette 3) Electrical stimulation machines with external electrodes 4) GRASP motor training items 5) A manual for training of intervention providers was provided, outlining serial casting and motor training key procedures. *Level 0 InTENSE electrical stimulation program materials can be accessed from the first author.* *GRASP program materials can be accessed online at* *https://strokerecoverybc.ca/wp-content/uploads/2011/11/GRASP_All_3_levels11490.pdf*
Item 4: What (Procedures): the procedures, activities, and/or processes used in the intervention, including any enabling or support activities.	Control group receive a written handout along with recommendations from an occupational or physical therapist for practising moving after injections. A telephone call within the week of injection is provided to support the recommendation to complete daily arm and hand exercises.	InTENSE combines management of the impairment of contracture with functional task-specific exercise and strength training. Serial casting is used to address contracture, then it involves repetitive, progressive, resistive exercise during goal-directed functional activity, with the therapist providing decreasing amount of support until by week 10, the participant is only having once a week contact and is practising daily independently.

TIDieR Criteria continued…	Control intervention	Experimental intervention
Item 5: Who provided, their expertise, background and any specific training given.	Control intervention was delivered by qualified physical and occupational therapists, registered with the appropriate professional bodies who ensure quality of clinical professionals.	InTENSE was delivered by qualified physical and occupational therapists, registered with the appropriate professional bodies who ensure quality of clinical professionals. A one-day training course was provided to train in serial casting, movement training, GRASP movement training program, motivational interviewing and encouraging self-directed practice.
Item 6: Modes of delivery (e.g. Face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group.	Control intervention was provided individually: 1) Face-to-face provision of the handout and recommendation for exercises immediately following botulinum toxin-A injection at the clinic. 2) Single telephone call to remind participant to practice according to handout, and record their practice.	InTENSE therapy was provided individually: 1) Face-to-face provision of the therapy program with decreasing intensity, and increased expectation to practice independently. 2) Telephone calls to remind participant to practice according to handout, and record their practice.
Item 7: Where, the type(s) of location(s) where the intervention occurred, including any necessary infrastructure or relevant features.	Control intervention practice (self-practice) occurred in the home environment. No infrastructure was provided; participant's own home served as the environment.	InTENSE therapy program was delivered in both the clinic environment and the home environment. Infrastructure included over-bed table and chair with arms; if these were not available in the home environment, they were loaned to the participant for the duration of the study.
Item 8: When and how much. A description of the number of times the intervention was delivered and over what period of time including the number of sessions, their schedule, and their duration, intensity or dose.	Control intervention was standardized to 2 sessions: 1) Handout and brief (15-30 minute) introduction to the type of exercises that would be appropriate for the participant to complete along with encouragement to practice independently daily for 1 hour. 2) Telephone call (15 minutes) within 1 week of randomization.	InTENSE therapy was standardized to a 12-week program: 1) Weeks 1 & 2: 3 serial casts applied to place the wrist in maximum extension. 2) This was then followed by 10 weeks of movement training which was delivered in fortnightly blocks of face-to-face support as follows: - Weeks 3 & 4: 3 clinic sessions per week, plus a home visit to set up in-home practice - Weeks 5 & 6: 2 clinic sessions per week - Weeks 7 & 8: 1 clinic session per week - Weeks 9-12: weekly telephone calls 3) Participants were encouraged to practice for 1 hour per day, 7 days a week during the 10 weeks (ie, approximately 70 hours in total).
Item 9: Tailoring, if the intervention was planned to be personalised, titrated or adapted, then describe what, why, when, and how.	Control intervention was not personalized nor adapted.	The InTENSE electrical stimulation program was standardised, however electrode placement and stimulation intensity were personalised by the treating therapist to ensure tetanic contraction of target muscles. Once electrode placement was established, this did not change for the study duration, however the stimulation intensity may change over time at the therapist discretion. The movement training program was standardised with a set of task-specific exercises (freely available online at www.neurorehab.med.ubc.ca/grasp). The experienced therapists selected exercises from the GRASP program which took into account the amount of ability to move, as demonstrated by each individual participant. Therapists tailored the program to each participant to ensure the participant could self-practice but was sufficiently challenged such that they could not complete the program in <1 hour. Participants may have received a combined program at times (e.g. electrical stimulation exercises from InTENSE level 0 + GRASP level 1 exercises).

TIDieR Criteria continued…	Control intervention	Experimental intervention
Item 10: Modifications. If the intervention was modified during the course of the study, describe the changes (what, why, when, and how).	No modifications were made to the standardized handout after participant recruitment began.	No modifications were made to the standardized exercises after participant recruitment began; participants could progress through the levels of the programs as their upper limb movement improved.
Item 11: How well (Planned) If intervention adherence or fidelity was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them.	1) Audit of therapist documentation to assess provision of handout and content of telephone call 2) Patient recorded details of the amount of practice undertaken on log-sheet.	1) Audit of therapist documentation to assess provision of InTENSE program 2) Photographs taken of every serial cast to assess adherence to casting protocol 3) Patient recorded details of the amount of practice undertaken on log-sheet 4) Observation of therapy sessions (1-2 sessions per clinic per annum)
Item 12: How well (Actual) If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.	The practice log-sheet is used to record dose of practice by the participants in the usual care group.	The practice log-sheet is used to record both dose and intervention level by participants in the InTENSE group.