Supplementary file S2. Table of reference for evaluating the reporting quality of robotic and conventional upper limb interventions in stroke rehabilitation according to the TIDieR-Rehab checklist.

COMPLETENESS investigates the extent to which the intervention group's information pertaining to a TIDieR-Rehab item was described for replication.

TIDieR-Rehab ratings	Definition
Complete	If the information pertaining to a checklist item was fully and clearly described, to an extent which would allow it to be replicated.
Incomplete	If the information pertaining to a checklist item was partially or ambiguously described.
Absent	If there is no information pertaining to a checklist item. Note, there will be no corresponding reporting location.

CONSISTENCY OF REPORTING LOCATION is defined as the extent to which the most key intervention information pertaining to a TIDieR-Rehab item is located in the same section as other intervention groups.

Reporting locations
Abstract
Introduction
Methods
Results
Discussion
Conclusion
Table
Figure
Key messages box
Acknowledgements
Appendix
Supplementary file
Referenced article

SUPPORTING REFERENCES

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TIDieR-REHAB CHECKLIST (Signal et al., 2024)[1]

SECTION 1. BRIEF NAME	
Item 1.	Provide the name or a phrase that describes the intervention.
SECTION 2. WHY	
# Item 2.	Describe any rationale, theory or goal of the elements essential to the intervention. *Essential elements, also known as "active ingredients", are the core components of the intervention that are expected to be linked to effects or outcomes of interest.*
SECTION 3. WHO	
* Item 3.	Describe who the intervention is intended for.
SECTION 4. WHEN	
* Item 4.	Describe when the intervention commenced in relation to the onset or stage of the condition and/or other relevant events.
SECTION 5. WHAT	
Item 5A.	Materials: Describe 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. Provide information on where the materials can be accessed (for example, online appendix, URL).
Item 5B.	Procedures: Describe each of the procedures, activities and/or processes used in the intervention, including any enabling or support activities.
SECTION 6. WHO PROVIDED	
Item 6.	For each category of intervention provider (for example, psychologist, nursing assistant), describe their expertise, background and any specific training given.
SECTION 7. HOW	
Item 7.	Describe the modes of delivery (such as 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.
SECTION 8. WHERE	
# Item 8.	Describe the type(s) of environment(s) where the intervention occurred, including any necessary infrastructure or relevant features. *Environments and their features may include the relevant physical, social, cultural, economic, political and/or systemic context(s) of the intervention.*
SECTION 9. HOW MUCH	
* Item 9A.	Session(s) duration: Specify the planned session(s) duration of the intervention.
* Item 9B.	Essential elements amount: Specify the planned session(s) duration and/or repetitions of the essential elements of the intervention. *Essential elements amount refers to the time and/or repetitions, within the total duration of a single session, that is spent "actively" participating in the core components of the intervention.*
* Item 9C.	Frequency: Specify the planned frequency of the intervention.
* Item 9D.	Intervention length: Specify the planned overall length of the intervention.
SECTION 10. HOW CHALLENGING	
* Item 10.	Describe the approach(es) used to set and monitor the intervention/task challenge level. *Challenge may include the nominal, functional or perceived level of difficulty, effort, physiological intensity or cognitive load of an intervention/task at a given time and may be evaluated using subjective or objective measures.*
SECTION 11. REGRESSION/PROGRESSION	
* Item 11.	Describe the planned regression and/or progression of dosage parameter(s), including when and how. *Dosage parameters refer to the amount (Section 9. How much) and challenge (Section 10. How challenging) of the intervention.*
SECTION 12. PERSONALISATION	
* Item 12A.	Needs: If supplementary strategies were planned to enable the delivery of the essential elements of the intervention in response to specific individual or group needs, then describe what, why, when and how. *Supplementary strategies refer to intervention adjuncts (for example, physical assistance, verbal cueing, props) that must be used by some individuals or groups to facilitate effective participation in the essential elements.*
* Item 12B.	Preferences: If the intervention was planned to be adapted for personal preferences, then describe what, why, when and how.

SECTION 13. PROTOCOL DEVIATIONS	
# Item 13.	If there were deviations in the intervention protocol during the course of the study, describe the changes (what, why, when and how).
SECTION 14. HOW WELL	
Item 14A.	Plan: 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.
Item 14B.	Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.
SECTION 15. HARMS	
* Item 15A.	Plan: Describe the monitoring of adverse consequences. *Adverse consequences include any negative, undesired effects related to the intervention, including physical, mental, social and/or spiritual effects.*
* Item 15B.	Actual: Describe any adverse consequences, including the number, seriousness and relatedness to the intervention.

Key: **, new item unique to the TIDieR-Rehab checklist; #, adapted original TIDieR item for the TIDieR-Rehab checklist; TIDieR, Template for Intervention Description and Replication.*

Supplementary table S2. Table of reference for evaluating robotic and conventional upper limb intervention reporting (with intervention-specific guidance and examples) according to the TIDieR-Rehab checklist.

ITEM	GUIDANCE FOR EVALUATION	EXAMPLES OF REPORTING
SECTION 1. BRIEF NAME		
Item 1. Provide the name or a phrase that describes the intervention.	COMPLETE: Searchable name or phrase that briefly describes the intervention, which may include the name of the robotic device. INCOMPLETE: Summary of intervention components only (e.g., conventional training including upper limb strength training, stretching, repetitive movement, etc.). ABSENT: 'Conventional', 'usual', 'standard', 'experimental', 'control', 'physiotherapy', 'occupational therapy' only without any indication of what was delivered in a brief name or phrase. *NOTE: Must provide brief name or phrase once, then may use 'experimental', 'control' , or abbreviation thereafter.*	**ROBOTICS** COMPLETE: Methods – RTP combined with robotic-assisted therapy[2] COMPLETE: Methods – Hexo-UR30A [name of the robot][3] **CONVENTIONAL** COMPLETE: Methods – Therapist-supervised repetitive task practice (RTP)[2]
SECTION 2. WHY		
Item 2. Describe any rationale, theory or goal of the elements essential to the intervention. *Essential elements, also known as "active ingredients", are the core components of the intervention that are expected to be linked to effects or outcomes of interest.*	COMPLETE: 'Why' of the specific elements of the intervention (e.g., bilateral, active-assisted, task-oriented, repetitions) and how it may be linked to an effect. INCOMPLETE: Relates specific elements of the intervention to a broader or generic 'why' of rehabilitation (e.g., improve upper function) without further explanation. ABSENT: 'Why' of the intervention unrelated to potential effects (e.g., reduce therapist workload). *NOTE: Evaluate explicitly referenced articles (e.g., refer to paper X for more information about the hypothesised effects).*	**ROBOTIC** COMPLETE: Introduction – The robotic device used in this project focuses on improving distal motor function by enhancing active range of motion (AROM) of the wrist and fingers and reducing spasticity (exaggerated reflex response to slow or fast stretch of wrist or finger flexor muscles) about the wrist. The device is based on principles of motor learning, as it engages and provides feedback to the individual during the performance of repetitive activities that are intended to transfer to functional distal motor activities. The robotic device provides consistent and precise therapy for long durations without fatigue. … The resultant increase in the quantity and quality of afferent information provided to the patient during robotic device use may facilitate motor learning or relearning.[2] **CONVENTIONAL** INCOMPLETE: Introduction – Repetitive task practice (RTP) strategies, developed for use in constraint induced movement therapy (CIMT), can improve hand function and individuals' perception of their health-related quality of life (HRQOL). … A systematic review of the rehabilitation literature indicates strong evidence that intensity and

		task specificity are primary indicators of an effective treatment program following stroke. In addition, training should be repetitive, functional, meaningful, and challenging to the patient; these are characteristics of task practice interventions that have been shown to improve upper extremity function in patients with stroke.[2]
SECTION 3. WHO		
Item 3. Describe who the intervention is intended for.	COMPLETE: Diagnosis of stroke AND specifies severity of upper limb impairment/disability (e.g., Fugl-Meyer assessment upper extremity, modified Ashworth scale, Brunnstorm stages) OR diagnosis of stroke and specifies a range of upper limb impairment/disability severities were included, with participant demographics or severities provided.	**ROBOTIC** COMPLETE: Methods – Participant eligibility criteria included: first clinical stroke diagnosis; status 3 to 9 months poststroke; Mini-Mental Status Examination 28 score of 24; ability to stand independently for 2 minutes; passive range of motion (PROM) of 45 degrees for abduction, flexion, or external rotation of the shoulder or pronation of the forearm; active extension of the wrist of 10 degrees; active extension of the metacarpophalangeal and interphalangeal joints of the thumb; and 10 degrees of extension in at least 2 additional digits.[2] COMPLETE: Methods – Using an assignment list based on a random number table, we first stratified participants by impairment level (initial upper-limb FMA <20, 20–39, ≥40) and then assigned them to the robot low-dose group (Robot-Lo), robot high-dose group (Robot-Hi), or CG, which received additional conventional therapy. Subject demographics on entry are shown in Table 1.[4] **CONVENTIONAL** COMPLETE: As above.[2]
SECTION 4. WHEN		
Item 4. Describe when the intervention commenced in relation to the onset or stage of the condition and/or other relevant events.	COMPLETE: Specifies time since stroke/stage defined in weeks, months, or years in relation to when the intervention commenced OR specifies a range of stroke stages were included, with participant demographics or stages when the intervention commenced provided. INCOMPLETE: Names stage of stroke only (e.g., subacute) without specifying timeframe in weeks, months, or years OR specifies stage of stroke but it is unclear if the intervention commenced during that stage.	**ROBOTIC** COMPLETE: Methods – Participant eligibility criteria included: first clinical stroke diagnosis; status 3 to 9 months poststroke; Mini-Mental Status Examination28 score of 24; ability to stand independently for 2 minutes; passive range of motion (PROM) of 45 degrees for abduction, flexion, or external rotation of the shoulder or pronation of the forearm; active extension of the wrist of 10 degrees; active extension of the metacarpophalangeal and interphalangeal joints of the thumb; and 10 degrees of extension in at least 2 additional digits. … Results – Participants in the RTP-only group were, on average, [1]84.1 days poststroke, and participants in the combined therapy group were, on average, 269.6 days poststroke (*P*=.16).[2] **CONVENTIONAL** COMPLETE:

		As above.[2]
SECTION 5. WHAT		
Item 5A. Materials: Describe 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. Provide information on where the materials can be accessed (for example, online appendix, URL).	COMPLETE: Any specialist equipment (e.g., robotic device) must be named with manufacturer details or have an in-depth description, including the joint movement/degrees of freedom involved AND/OR examples of any task-related equipment (e.g., cup, cutlery, coins) ABSENT: 'Robotic therapy', 'task oriented training', 'functional tasks' only without description or access to materials. *NOTE: Figures or pictures may help clarify materials.*	**ROBOTIC** COMPLETE: Table – InMotion robotic gym system is used (http://bionikusa.com/healthcarereform/ upper-extremity-rehabilitiation/). The robotic gym consists of three robot modules to train the participant to use their upper limb: • The shoulder-elbow module (InMotion ARMTM interactive therapy system). The participant moves their affected arm radially in eight different directions • The wrist module (InMotion WRISTTM interactive therapy system). The movements of the participant's wrist include flexion/extension, abduction/ adduction and pronation/supination • The hand module integrated onto the shoulder-elbow module (InMotion HANDTM). This encourages whole-arm movements that involve limb transport and grasp/release.[5] **CONVENTIONAL** ABSENT: Table – Everyday items to enable functional task practice are provided.[5]
Item 5B. Procedures: Describe each of the procedures, activities and/or processes used in the intervention, including any enabling or support activities.	COMPLETE: Step-by-step descriptions, including the level of robotic assistance (e.g., active, active-assisted, passive) and related decisions as appropriate. *NOTE: May overlap with other sections (e.g., How much, How challenging, Regression/Progression) and should not be double-counted.*	**ROBOTIC** COMPLETE: Methods – The HM provided biofeedback to the participant during various activities requiring varying levels of wrist control. The therapist monitored HM usage and provided assistance in the donning and doffing of the device. …. The aim of the spasticity protocol was to decrease flexor tone of the fingers and wrist via feedback and assistive motion of the fingers and wrist. The initial position of the hand was at approximately 30 degrees of flexion. The air muscle was inflated to bring the wrist to approximately half of the participants' available PROM. The amount of force necessary to achieve this position was measured by FSRs within the ARM device while a potentiometer provided wrist position. A flexor stiffness ratio (ratio of force to position) was calculated and displayed on the LCD graph, and the participants' goal was to decrease the amount of wrist flexor activity during the next 60 seconds. If flexor activity was reduced, the height (number) of illuminated LEDs, which was scaled to each participant, also decreased while wrist extension increased. After 60 seconds, the air pressure was released from the air muscle, and the wrist returned to its initial flexed position. Participants were encouraged to decrease the height of the line through relaxation on subsequent trials.[2]

		CONVENTIONAL COMPLETE: Methods – Some typical activities were: ironing, potting a plant, holding cards, and so on. In the present context, the variables manipulated were related to the temporal and spatial domains for task completion. Upon selection, the tasks were broken into segments that required successful completion before the entire task was "put together." For example, for the activity of potting a plant, the first component was reaching to grasp and release a hand shovel, then raising the shovel to the top of a pail and placing it back on the table. These individual actions were reinforced through RTP. Ultimately, the entire complement of movements included shoveling dirt into the pot and placing seedlings or plant stems in the pot. As can be deduced, this sequence placed progressively greater demands on multijoint control and sequencing. Improvements in spatial control were accomplished by having the therapist progressively move the object farther from the participant, thus imposing greater joint ranges of motion. Temporal domain elements were engaged by requiring the participant to repeat the task components or total task activity as frequently as possible during a defined time interval. The activities that the participant performed and the feedback provided were consistent with models of massed RTP practice schedule.[2]
SECTION 6. WHO PROVIDED		
Item 6. For each category of intervention provider (for example, psychologist, nursing assistant), describe their expertise, background and any specific training given.	COMPLETE: Specifies the qualification/background AND experience/training of all involved in intervention delivery. INCOMPLETE: Specifies the qualification/background (e.g., registered physiotherapist) only. ABSENT: 'Physical therapy', 'occupational therapy', as this could refer to intervention principles rather than a qualification.	**ROBOTIC** COMPLETE: Supplementary file – A senior therapist (physiotherapist or occupational therapist) assesses each participant at their initial session on each robot module to ensure correct positioning and familiarisation with the robot. Therapy assistants (NHS band 3 or above) then deliver the robot-assisted training programme with senior supervision and support. A senior therapist reviews each participant at their last robot-assisted training session and provides feedback. All staff involved in the study received study-specific training. The senior therapists and therapy assistants delivering the robot-assisted training programme receive specific training in this aspect.[5]
		CONVENTIONAL COMPLETE: Supplementary file – A senior therapist (physiotherapist or occupational therapist) assesses each participant at their initial therapy session and they jointly select up to 4 upper limb rehabilitation goals and activities to practise. Therapy assistants (NHS band 3 or above) then deliver the enhanced upper limb therapy programme with senior supervision and support. A senior therapist reviews the participant every 4 weeks to plan/adjust the programme according to progress. A senior therapist reviews each participant at their last enhanced upper

		limb therapy session and provides feedback. All staff involved in the study received study-specific training. The senior therapists and therapy assistants delivering enhanced upper limb therapy receive specific training in this aspect.[5]
SECTION 7. HOW		
Item 7. Describe the modes of delivery (such as 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.	COMPLETE: Specifies the therapist to patient ratio. INCOMPLETE: Unclear therapist to patient ratio but specifies mode of therapy (e.g., face-to-face). *NOTE: Figures or pictures may help clarify delivery modes.*	**ROBOTIC** INCOMPLETE: Introduction – A combined therapy group whose participants received 30 hours of robotic-assisted therapy ie, Hand Mentor§ [HM] and 30 hours of therapist-supervised RTP. …. Participants in the combined therapy group divided their time equally between the RTP activities with a therapist and supervised HM use.[5] **CONVENTIONAL** INCOMPLETE: Introduction – An RTP-only group whose participants received 60 hours of therapist-supervised RTP.[5]
SECTION 8. WHERE		
Item 8. Describe the type(s) of environment(s) where the intervention occurred, including any necessary infrastructure or relevant features. *Environments and their features may include the relevant physical, social, cultural, economic, political and/or systemic context(s) of the intervention.*	COMPLETE: Describes the physical room OR in-depth description of equipment (e.g.., table dimensions) that it could be inferred. INCOMPLETE: 'xx hospital', 'xx clinic', 'xx university', 'xx centre', which indicates the facilities but not the room requirements. *NOTE: Figures or pictures may help clarify environment.*	**ROBOTICS** COMPLETE: Supplementary file – NHS hospital facilities: dedicated therapy room.[5] **CONVENTIONAL** COMPLETE: Supplementary file – NHS hospital facilities: therapy gym or dedicated therapy room.[5]
SECTION 9. HOW MUCH		
Item 9A. Session(s) duration: Specify the planned session(s) duration of the intervention.	COMPLETE: Typically specified in minutes or hours OR provides rules on how duration was prescribed.	**ROBOTICS** COMPLETE: Supplementary file – One hour is allowed for each therapy session to facilitate preparation and set up.[5] **CONVENTIONAL** COMPLETE: As above.[5]
Item 9B. Essential elements amount: Specify the planned session(s) duration and/or repetitions	COMPLETE: Differentiates essential elements amount from session(s) duration (Item 9A); typically specified in seconds on/off, minutes, or repetitions.	**ROBOTICS** INCOMPLETE: Supplementary file – The … programme is provided for up to 45 min per day, … , in addition to usual NHS care. One hour is allowed for each therapy session to

of the essential elements of the intervention. *Essential elements amount refers to the time and/or repetitions, within the total duration of a single session, that is spent "actively" participating in the core components of the intervention.*	INCOMPLETE: 'Therapist determined' without any explanation or examples. INCOMPLETE: Without specification of rests or passive time, the essential elements amount provided seems unrealistic for continuous rehabilitation (i.e., >30 minutes).	facilitate preparation and set up. [5] **CONVENTIONAL** INCOMPLETE: As above.[5]
Item 9C. Frequency: Specify the planned frequency of the intervention.	COMPLETE: Typically specified in sessions/week. INCOMPLETE: Number of sessions is clear but schedule is not specified (e.g., 15 one-hour sessions over 3 weeks). ABSENT: Number of sessions not specified (e.g., 4 hours over 4 weeks).	**ROBOTICS** COMPLETE: Supplementary file - The … programme is provided for up to 45 min per day, 3 days per week … , in addition to usual NHS care. One hour is allowed for each therapy session to facilitate preparation and set up.[5] **CONVENTIONAL** COMPLETE: As above.[5]
Item 9D. Intervention length: Specify the planned overall length of the intervention.	COMPLETE: Typically specified in total number of hours, sessions, weeks, or a goal to achieve for discharge/completion of intervention.	**ROBOTICS** COMPLETE: Supplementary file - The … programme is provided for week for … 12 weeks (a total of 36 therapy sessions), in addition to usual NHS care. One hour is allowed for each therapy session to facilitate preparation and set up.[5] **CONVENTIONAL** COMPLETE: As above.[5]
SECTION 10. HOW CHALLENGING		
Item 10. Describe the approach(es) used to set and monitor the intervention/task challenge level. *Challenge may include the nominal, functional or perceived level of difficulty, effort, physiological intensity or cognitive load of an intervention/task at a given time and may be evaluated using subjective or objective measures.*	COMPLETE: If based on therapist or robot decision, describes the process / examples. INCOMPLETE: 'Therapist set level of challenge', without explanation of process / examples. ABSENT: 'Therapist personalized the intervention' without specifying this related to challenge. *NOTE: Challenge may be set and monitored according to the task (e.g., fixed stretching load, force, task complexity), OR ability (e.g., assist-as-needed monitoring, Fugl-Meyer assessment upper extremity score), OR subjective experience*	**ROBOTICS** COMPLETE: Supplementary file – However, the physical therapist selected and adapted the exercises, in term of workspace and difficulty, to the subject's residual ability. … To adapt the protocol to the patient's level of impairment, each patients was first categorized as "severe", "moderate", or "mild", according to the Fugl-Meyer Assessment (FMA): severe (FMA 0 – 28); moderate (FMA 29 – 42); and mild (FMA 43 – 66)1 . Then, the corresponding treatment, with a raising level of difficulty, was delivered. … Each game has several levels, with an increasing difficulty (e.g., in the Applehunter game, the number of falling apples, as well as their velocity, increase, and the basket size decrease progressively). The game goes to the next level if the patients perform the required requests predefined in the software [further specified in the Supplementary Material]. The movement range and the support against

	(perceived difficulty, self-reported confidence).	gravity provided by the device are set daily for each patient, according to his/her: (a) shoulder pain; (b) range of motion; (c) spasticity; and (d) strength.[6] COMPLETE: Methods – The initial position of the hand was at approximately 30 degrees of flexion. The air muscle was inflated to bring the wrist to approximately half of the participants' available PROM. The amount of force necessary to achieve this position was measured by FSRs within the ARM device while a potentiometer provided wrist position. A flexor stiffness ratio (ratio of force to position) was calculated and displayed on the LCD graph, and the participants' goal was to decrease the amount of wrist flexor activity during the next 60 seconds. If flexor activity was reduced, the height (number) of illuminated LEDs, which was scaled to each participant, also decreased while wrist extension increased.[2]
		CONVENTIONAL INCOMPLETE: Methods – Each therapist was free to adapt every rehabilitation session to the subject, according to their functional assessment and needs. Therefore, each activity duration, specific number of repetitions or difficulty of exercise to be performed during a conventional rehabilitation session was not predefined in the protocol.[6]
SECTION 11. REGRESSION/PROGRESSION		
Item 11. Describe the planned regression and/or progression of dosage parameter(s), including when and how. *Dosage parameters refer to the amount (Section 9. How much) and challenge (Section 10. How challenging) of the intervention.*	COMPLETE: Specifies regression/progression of amount *or* challenge through specific criteria (e.g., % success rate, number of repetitions, increase one difficulty level per week, based on self-reported pain) OR explanation / examples of therapist or robot process. INCOMPLETE: 'Therapist progressed the intervention', without explanation of process / examples or explicit reference to dosage parameters. INCOMPLETE: If it is cautiously inferred that there was no regression/progression (e.g., stretching programme). *NOTE: May overlap with other sections (e.g., How much, How challenging) and should not be double-counted.*	**ROBOTICS** COMPLETE: Methods – The therapist also adjusted difficulty levels based on participant performance and comfort level. …. The difficulty of the task (eg, range of motion necessary to reach the LED targets) was systematically increased as a participant had multiple consecutive successful trials. By changing the sensitivity, success across the difficulty levels encapsulated a wrist AROM between 11 and 76 degrees. …. They started in the easiest mode (ie, least amount of active wrist extension and flexion necessary to achieve the goal) and progressed to more difficult levels (ie, more active control of wrist extension and flexion) after consistently achieving an 85% success rate on a specific protocol.[2]
		CONVENTIONAL COMPLETE: Methods – Improvements in spatial control were accomplished by having the therapist progressively move the object farther from the participant, thus imposing greater joint ranges of motion. Temporal domain elements were engaged by requiring the participant to repeat the task components or total task activity as frequently as possible during a defined time interval.[2]

SECTION 12. PERSONALISATION		
Item 12A. Needs: If supplementary strategies were planned to enable the delivery of the essential elements of the intervention in response to specific individual or group needs, then describe what, why, when and how. *Supplementary strategies refer to intervention adjuncts (for example, physical assistance, verbal cueing, props) that must be used by some individuals or groups to facilitate effective participation in the essential elements.*	COMPLETE: Rationale or criteria for enabling the intervention for some individuals. COMPLETE: States there was no personalization to needs. ABSENT: Standard personalization procedures for all individual (e.g., all receive tailored robotic assistance). ABSENT: Personalized intervention, without explicit reference to needs.	**ROBOTICS** COMPLETE: Supplementary file – For subjects who could achieve full ROM before training (N = 2), movements were planned by the device at velocities equal to those measured using their ipsilesional arms during unsupported reaches at a self-selected, comfortable speed.[7] **CONVENTIONAL** ABSENT: Supplementary file – The therapists are also able to tailor the specifics of each activity practised to the ability of the participant, taking into consideration a range of upper limb parameters (i.e. sensation and proprioception, range of motion, strengths and coordination), other functions (including sitting balance, visuo-spatial awareness, vision), as well as the person's cognitive and emotional status, communication skills and level of motivation.[5]
Item 12B. Preferences: If the intervention was planned to be adapted for personal preferences, then describe what, why, when and how.	COMPLETE: Specifies personalization to preferences, with description of process / examples (e.g., list of tasks or goals individual could choose from). INCOMPLETE: 'Personalized to preferences', with no further description. ABSENT: Personalized intervention, without explicit reference to preferences.	**ROBOTICS** INCOMPLETE: Methods – The RTP tasks were selected by each participant, in collaboration with the trainer, on the basis of personal preference, relevance, and interest.[2] **CONVENTIONAL** INCOMPLETE: As above.[2]
SECTION 13. PROTOCOL DEVIATIONS		
Item 13. If there were deviations in the intervention protocol during the course of the study, describe the changes (what, why, when and how).	COMPLETE: Change in intervention during the intervention (e.g., found excessive fatigue after 2 participants so changed session duration from 60 to 40 minutes). COMPLETE: States there were no protocol deviations. INCOMPLETE: Only states the deviation without reasoning.	**ROBOTICS** COMPLETE: Supplementary file – There have been no modifications to the interventions to date.[5] **CONVENTIONAL** COMPLETE: Supplementary file – There have been no modifications to the interventions to date.[5]
SECTION 14. HOW WELL		

Item 14A. Plan: 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.	COMPLETE: Assessment of adherence *or* fidelity during the intervention. ABSENT: Enhancing fidelity prior to the intervention (e.g., training of intervention providers). *NOTE: May be cautiously inferred from the reporting of How well – Actual.*	**ROBOTICS** COMPLETE: Supplementary file – Therapists/therapy assistants complete a robot-assisted training checklist to document attendance at sessions. The robot software records data on the robot protocol used, duration of the sessions and the number of repetitions of upper limb movements undertaken. Data from training sessions are periodically reviewed to monitor intervention adherence and feedback is provided to therapy staff delivering the intervention.[5] **CONVENTIONAL** COMPLETE: Supplementary file – Therapists/therapy assistants record session attendance, session duration, the type and number of goals, the type of activity practice (whole-task or part-task) and number of repetitions of each task at each session. Goal attainment is documented at each review session. Data from therapy sessions are periodically reviewed to monitor intervention adherence and feedback is provided to therapy staff delivering the intervention.[5]
Item 14B. Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.	COMPLETE: Specifies adherence to sessions (e.g., average, %) OR fidelity to dosage (e.g., hours, repetitions, challenge) COMPLETE: 'All participants completed the intervention tasks/sessions as planned', if all planned dosage parameters are clear. ABSENT: Description or figure of flow of participants.	**ROBOTICS** INCOMPLETE: Results – Thirty-four subjects (20 in the RG and 14 in the CG) did not complete at least 25 rehabilitation sessions due to a worsening of the clinical condition and were considered dropouts. … Therefore, 190 subjects were evaluated after the treatment (T1) and considered for the primary analysis.[6] **CONVENTIONAL** INCOMPLETE: As above.[6]
SECTION 15. HARMS		
Item 15A. Plan: Describe the monitoring of adverse consequences. *Adverse consequences include any*	COMPLETE: Describes how harms were monitored *during* the intervention (not in follow up). INCOMPLETE: Monitored harms *during* the intervention but not how and when.	**ROBOTICS** COMPLETE: To assess adverse events, the subjects were asked at the end of each session to report any new symptoms.[9]

negative, undesired effects related to the intervention, including physical, mental, social and/or spiritual effects.	INCOMPLETE: Only monitoring specific measures/types of harms (e.g., fatigue), rather than for any harms. ABSENT: Only describes study follow up measures (e.g., changes to pain). ABSENT: 'No adverse events occurred', with no description of monitoring. *NOTE: May be cautiously inferred from the reporting of Harms – Actual.*	**CONVENTIONAL** COMPLETE: As above.[9]
Item 15B. Actual: Describe any adverse consequences, including the number, seriousness and relatedness to the intervention.	COMPLETE: Where applicable, differentiates adverse events per group.	**ROBOTICS** COMPLETE: Results – There were no treatment-related serious adverse events. Events unrelated to study therapy were that 1 patient fell at home and 1 patient had a recurrent stroke (Fig. 1). In addition, the mean pain and fatigue ratings of the 3 intervention groups at the first and last therapy sessions were 1.0 to 2.9 on a scale of 0 to 10. The patients reported mild pain mainly due to muscle soreness or stiffness. The pain scores of most patients were maintained or decreased from the first to the last day, indicating that the study interventions did not increase pain of patients.[8]
		CONVENTIONAL COMPLETE: As above.[8]