



Welcome to the first issue of the COMBINE study newsletter and thank you very much for your interest in the study. The newsletter is designed to keep our health professional colleagues and adults with a traumatic brachial plexus injury, all potential participants in the study, informed of the study progress.

## WELCOME

### THE CHALLENGE

It is difficult to know from research studies what is the best treatment for adults with traumatic brachial plexus injuries. Because centres treating brachial plexus injury do not assess the same outcomes (e.g pain, movement, strength) often also using different measures, it is not possible to compare the results of treatment in adults. A further problem is that the outcomes (e.g. muscle strength) chosen in a study may not be the most relevant to people with a brachial plexus injury. As a result, it is difficult to work out how well a treatment works and it slows research progress down.

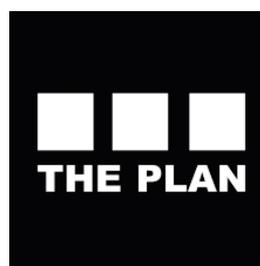
If every research study in brachial plexus injury used the same outcomes, then the results could be compared and combined.

## Core Outcome Measures in Brachial plexus INjuriEs

Where a set of main outcomes has been agreed for a health condition, it's called a '**core outcome set**'. The goal of this study is to develop a Core Outcome Set for **adult traumatic brachial plexus injury**

### The benefits of using a core outcome set are:

- It allows researchers to bring together all the studies to get a better understanding of what treatments are best
- It avoids the problem of some studies only reporting a selection of outcomes
- It ensures that those outcomes assessed are relevant to patients and healthcare professionals treating people with brachial plexus injury.



**Phase 1:** We will find out what outcomes are important to be measured by reviewing outcomes in published

studies and we will interview patients to find out what outcomes are important to them. From this we will produce a long list of outcomes.

**Phase 2:** We will ask adults with a traumatic

brachial plexus injury and health professionals to rate the importance of each outcome through a 3 round international online questionnaire. After individuals complete the questionnaire the results will be sent back to each person together with a reminder of their own score for each outcome and the groups score. Each person is asked to think about the groups result and decide if they want to change their score. This process is repeated until broad agreement is reached. This will produce a short list of the most important outcomes.

**Phase 3:** We will examine the literature for the most reliable and valid ways to measure each of the outcomes in the Core Outcome Set.



Ethical approval was given in January 2019 and the protocol was published in BMJOpen in June 2019

(<https://bmjopen.bmj.com/content/9/6/e030146>). We have completed the review of outcome reported in published studies to find out what outcomes are currently being measured. Preliminary results were presented at the British Society for Surgery of the Hand and British Association of Hand Therapy in April 2019. It was also presented at NARAKAS (an international brachial plexus meeting) in the Netherlands where we had lots of support from other health professionals and patients. To

date, we have interviewed four patients to explore what outcomes are important to them and we are continuing with recruitment for the interview study.



We are developing a video to explain the online questionnaire with patients and

clinicians. We aim to have analysed results of the patient interviews by autumn and begin designing the online questionnaire. The international online questionnaire should be up and running in early 2020!!



Caroline Miller is the Chief Investigator and a Physiotherapist who has worked with patients with brachial plexus injuries for 12 years.

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