

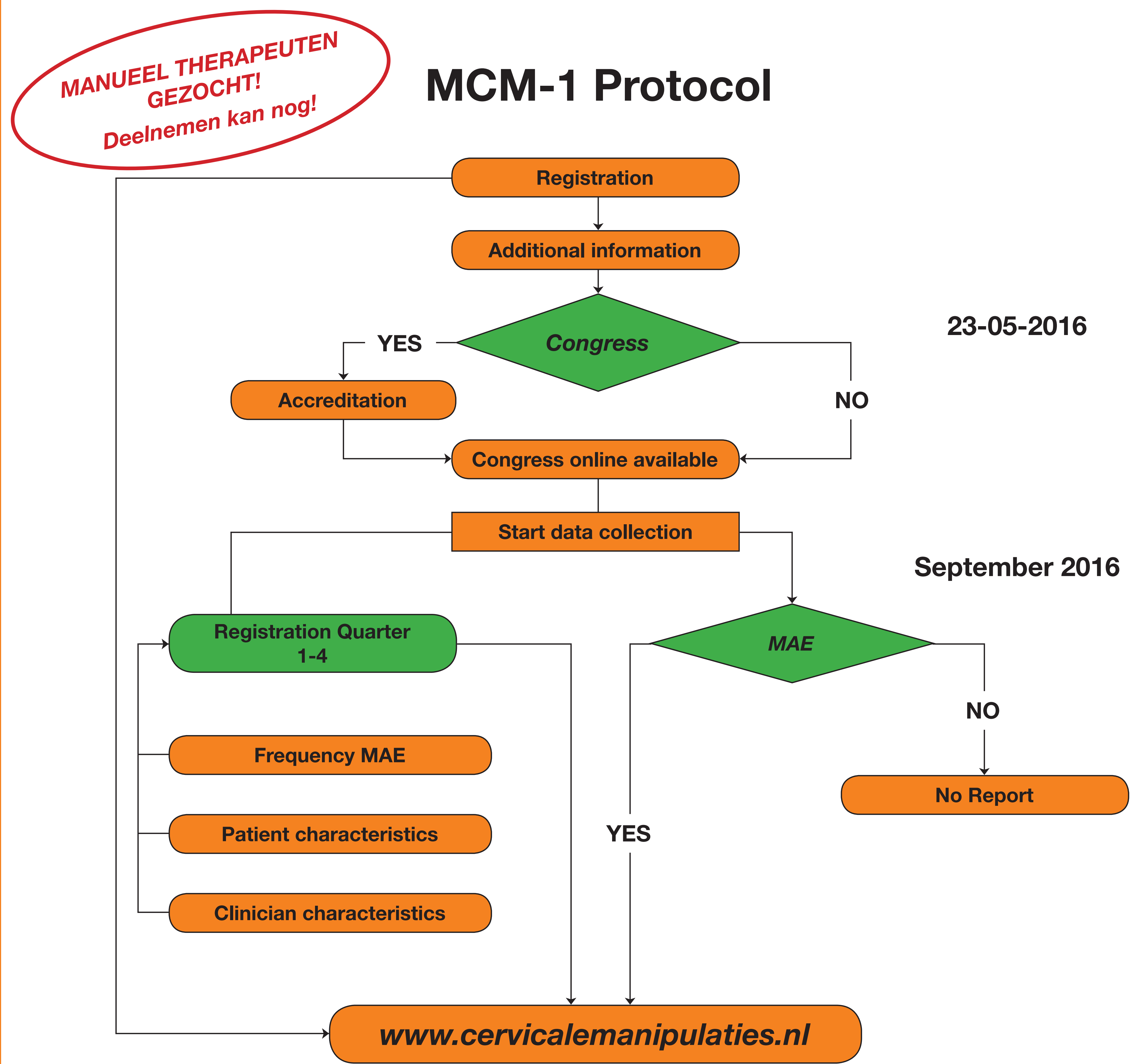
## Monitoring Cervical Manipulations (MCM): Design of a prospective cohort study.

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	MCM – 1 (Primary Care)	MCM – 2 (Secondary Care)
<b>Participants</b>	Manual therapists, chiropractors, osteopaths, manual practitioners	Advanced nurse practitioners neurology
<b>Outcome measures</b>	Frequency of MAE Patient characteristics Professional characteristics	Frequency of all Cervical Arterial Dissection Patient characteristics (only after CSM) Professional characteristics (only after CSM)
<b>Sample Size</b>	> 1000 professionals	> 10 hospitals

#### Introduction:

Major Adverse Events (MAE) following Cervical Spinal Manipulations (CSM) have been described anecdotally and are frequently discussed. Until now, *exact incidence rates are unknown*. Furthermore, there are doubts concerning the factors which may play a role in the occurrence of MAE.

#### Objectives:

Determine incidence rates of CSM following CSM.  
Inventory of patient and clinician characteristics.  
Introduce an incidence reporting system that fulfills all proposed criteria.

#### Methods:

A twofold prospective cohort study will be performed in The Netherlands. *Underreporting* is particularly likely to be present in primary care, but also likely to be present in secondary care.

For this reason measurements will be done in both primary care (MCM -1 group) and secondary care (MCM – 2 group). Data will be collected from September 2016 to September 2017. Considering the sensitivity of the subject and to gain the participants trust, an independent privacy monitoring board is to be founded.

#### Discussion:

This study may be helpful in collecting incidence rates of MAE following CSM, collecting relevant factors that play a role in the occurrence of these MAE, collecting epidemiological data and gain insight in the behavior of health professionals.



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