

A DESCRIPTIVE ANALYSIS OF TREATMENT GOALS IN A LARGE POST-STROKE OUTPATIENT POPULATION REFLECTED BY THE ROUTINE PRACTICE OF A REFERENCE SPASTICITY CLINIC



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INTRODUCTION/OBJECTIVES:

The aim of this study is to evaluate, through GAS (Goal Attainment Scaling), the response to botulinum toxin type A (BoNTA) administration, in the treatment of post-stroke spasticity.

GAS is a tool for the measurement of the success in achieving individual objectives, established between the team and the patient and/or carer.

The goals of BoNTA treatment were categorized based on the document "Goal Attainment Scaling – Evaluation of outcomes for Upper-limb spasticity" (GASeous): Domain 1 (D1): Impairment/Symptoms, domain 2 (D2): Activities/Function and goal areas. For D1: pain/discomfort; involuntary movements; range of movement/prevention of contractures; for D2: passive function; active function and mobility.

METHODS:

Descriptive and observational retrospective cross-sectional study of patients with post-stroke spasticity based on the routine practice of a reference spasticity clinic. Data were prospectively collected in a form specifically designed for that purpose. We retrieved data from the files of the post stroke patients treated in the outpatient botulinum toxin clinic in 2014 and all their treatment sessions between 2011 and 2016.

RESULTS:

There were 117 stroke patients and a total of 1057 botulinum toxin sessions. The mean age at stroke was 54 years (SD 12.37) where 56% were males and the median stroke to first BoNTA interval was 0.96 years (0.09-9.82).

The most frequent aetiology was ischemic (64%). The right hemiparesis was the most frequent impairment (55%). There was a mean of 9 BoNTA sessions (SD 6; 1-26) and 4.18 years was the average follow-up time (SD 3.35).

Most frequently patients, had Upper and BoNTA treatments to Upper and Lower Limbs (63%). Only Upper Limb was treated in 27% and only Lower Limb in 9% of the sessions.

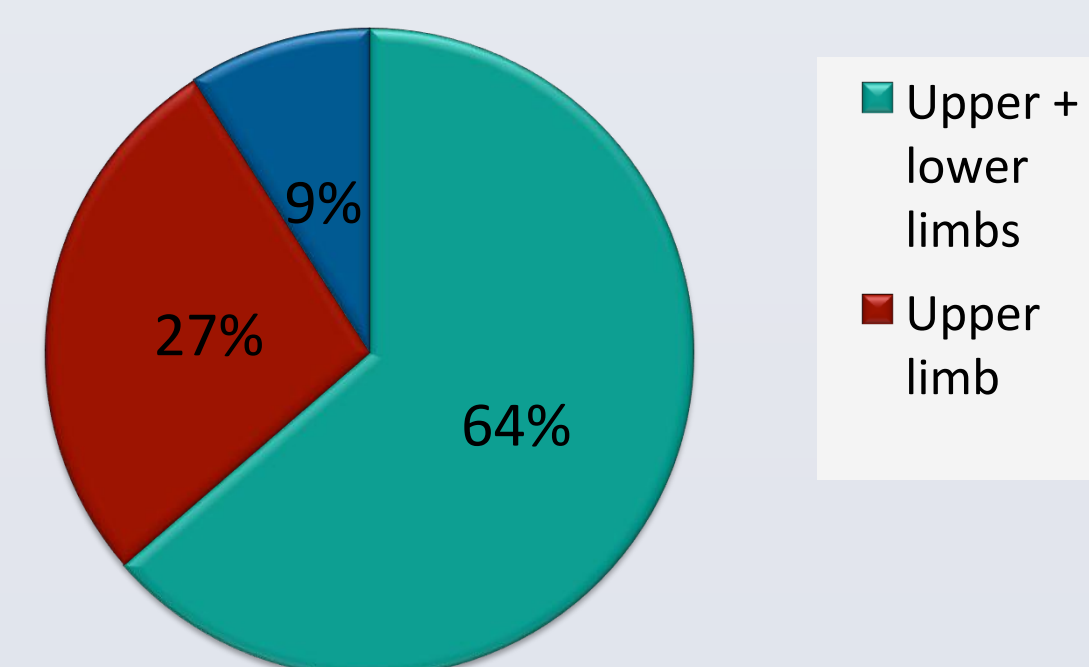
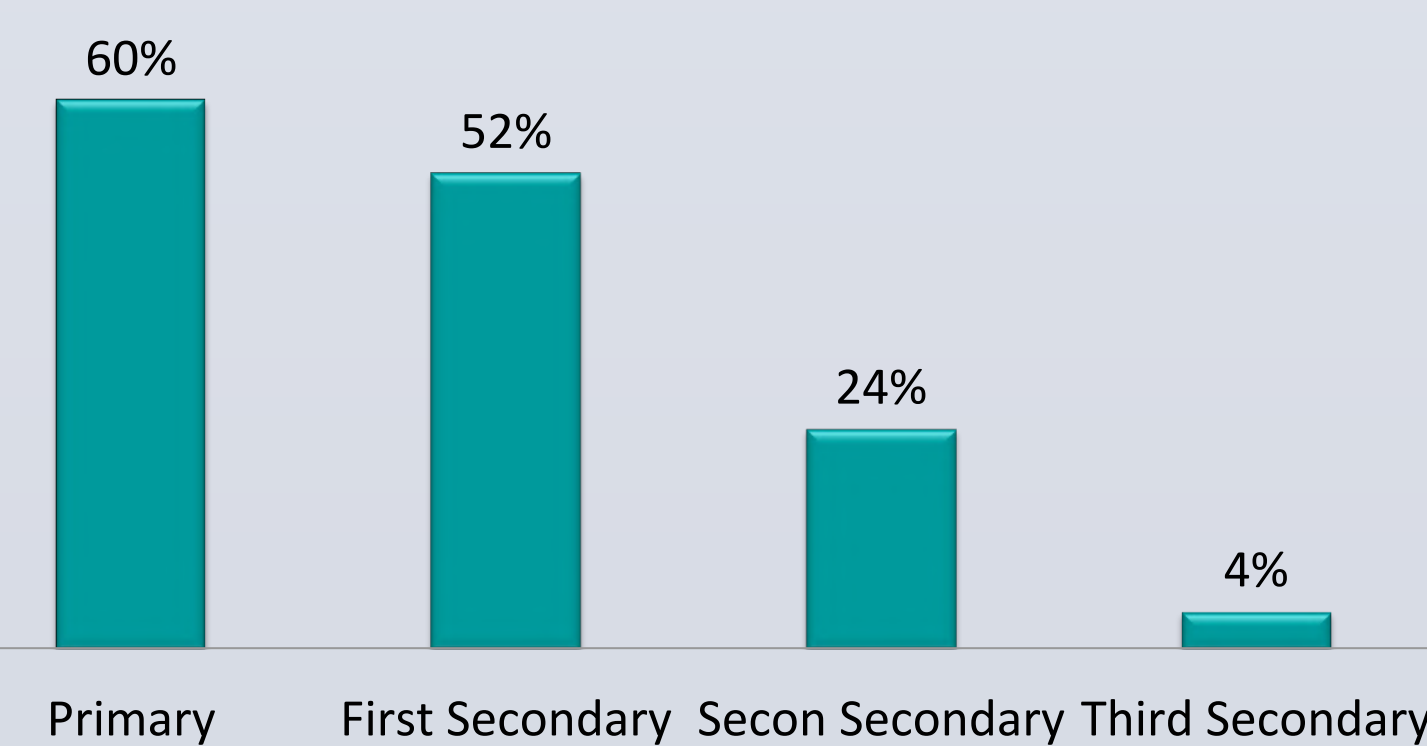


FIG 1: TREATED REGIONS

In 60% of 1057 treatment sessions, primary goals were clearly defined.

52% of the sessions had 1 secondary goal, 24% had 2 and 4% had 3 secondary goals.



Of the **647 primary goals** evaluated: the most frequent goal category was Impairment/Symptoms (D1). The global **achievement/overachievement rate was 78.5%**.

On the primary goals related to involuntary movements were the main priority for 30% of the patients, followed by mobility related goals with 25%, pain/discomfort 18%, range of motion prevention of contractures 11%. Passive and active function accounted for for 9% and 7% respectively.

We reviewed **556 first secondary goals**, with a global **achievement/overachievement of 78%**. Treating impairment/symptoms (D1) was the most frequent goal, for 58% of the patients.

262 second secondary goals, were reviewed, with a global **achievement/overachievement of 71%**. In this case, the activities/function (D2) goals was the most frequent, 53%.

There were **48 third secondary goals**, with a global **achievement/overachievement of 84%**. Activities/function (D2) goals were the most frequent with 60%.

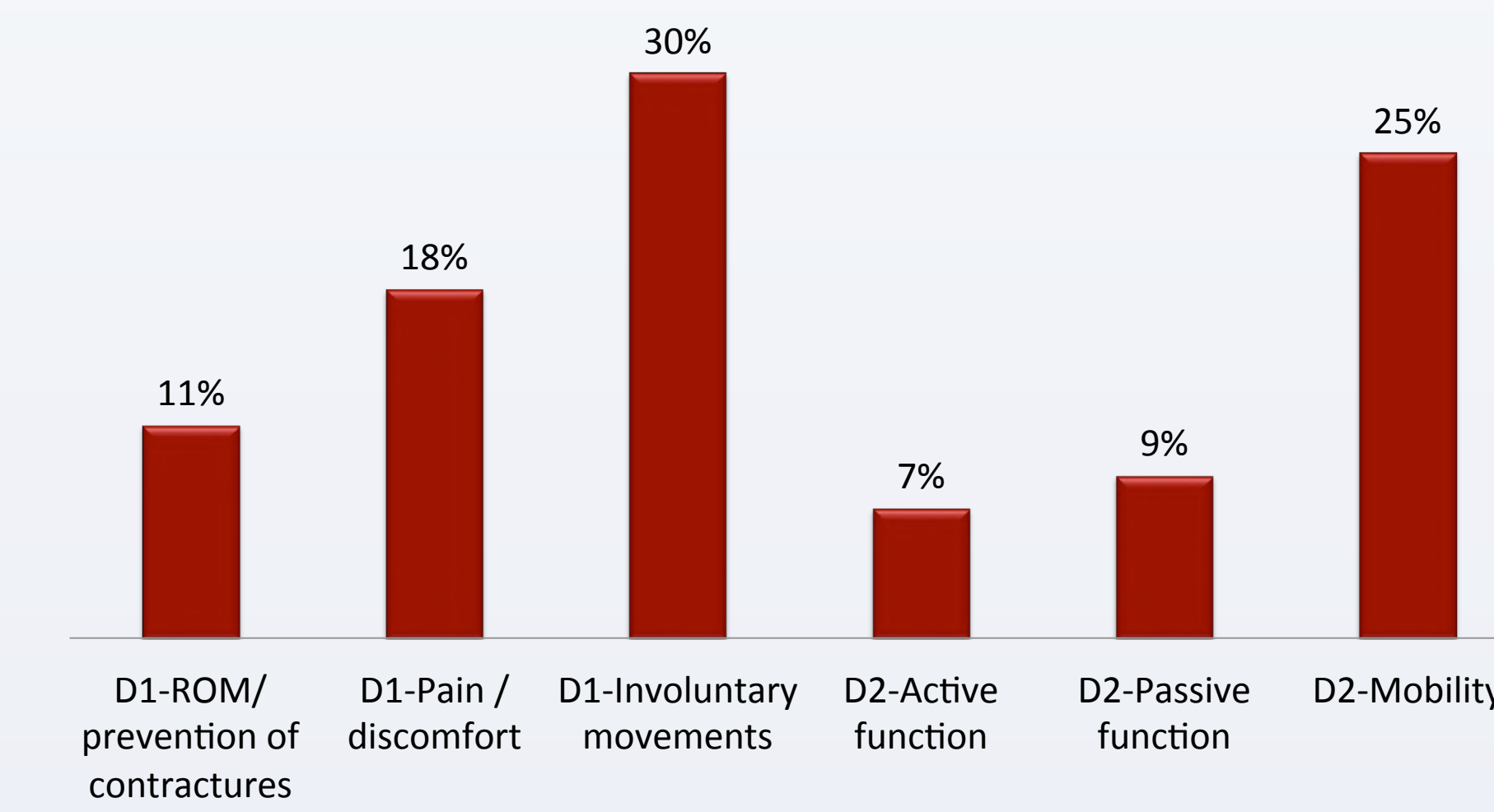


FIG 2: PRIMARY GOALS

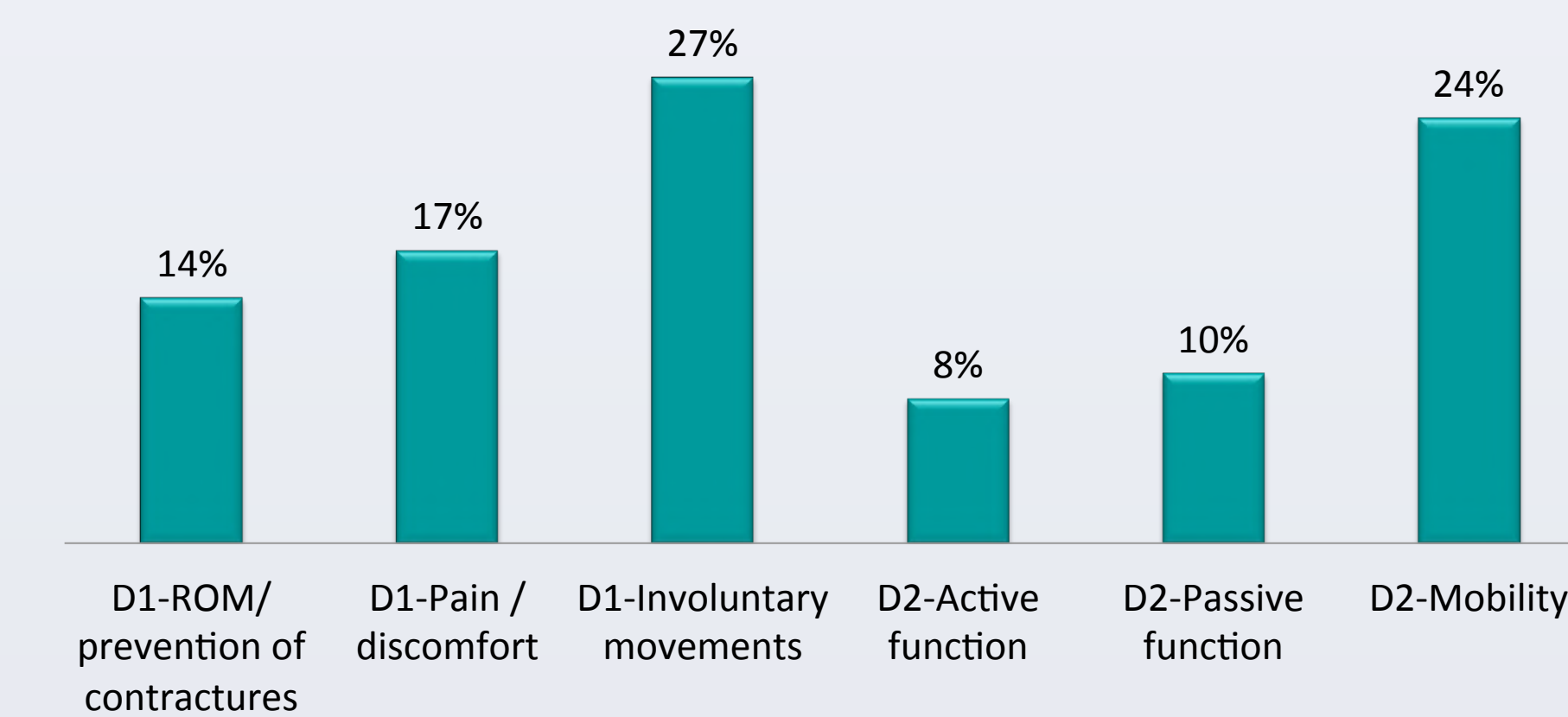


FIG 3: FIRST SECONDARY GOALS

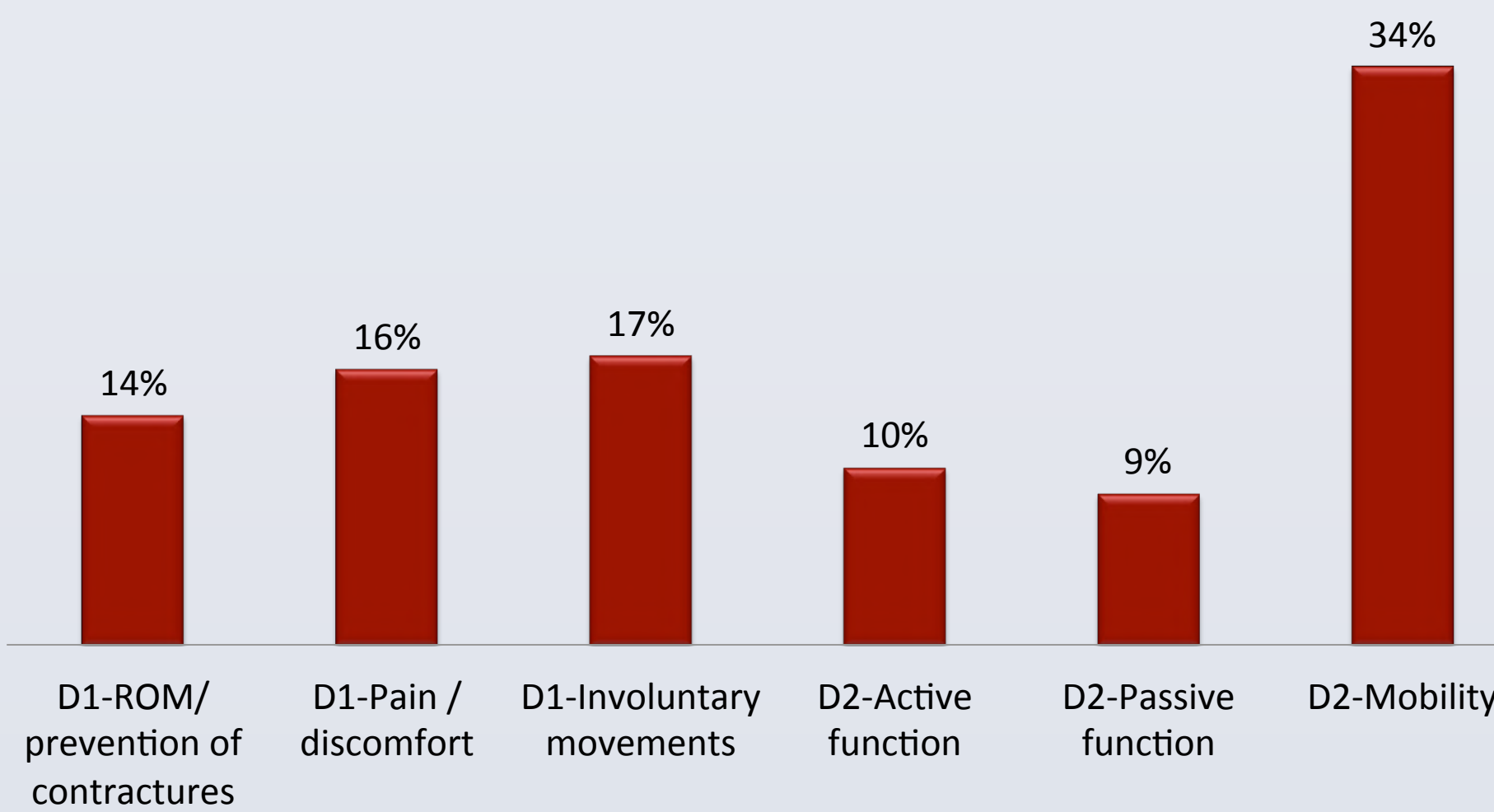


FIG 3: SECOND SECONDARY GOALS

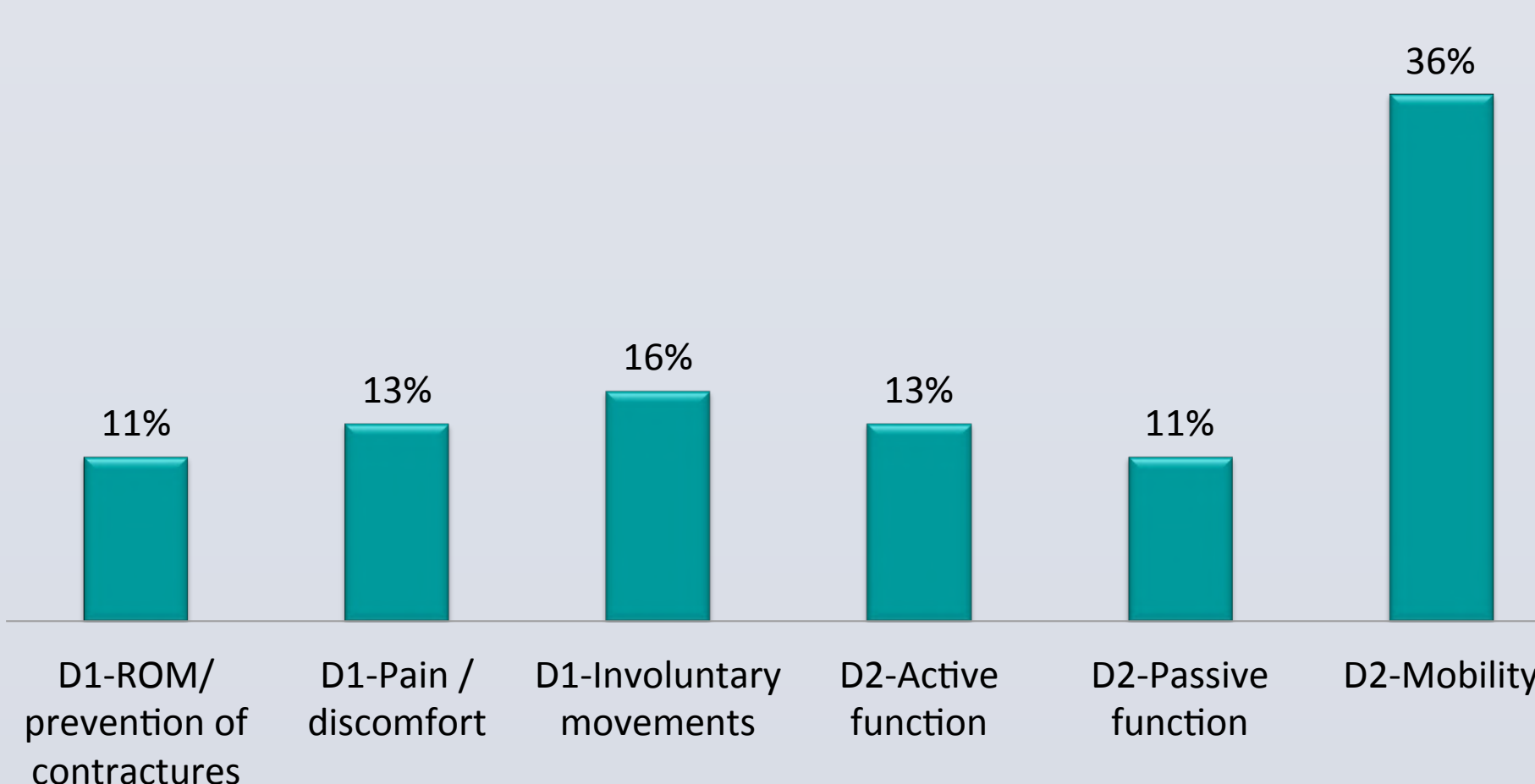


FIG 4: THIRD SECONDARY GOALS

CONCLUSIONS:

Impairment and symptoms related goals predominated as primary goals in our population. The most frequent areas chosen varied from primary to secondary goals.

The vast majority of patients achieved the goals established for each treatment cycle, regardless of the goal categories targeted.

GAS proved to be a useful and sensitive tool to measure treatment outcome with the focus on SMART goals based on the needs and expectations of patients/carers.

Establishing realistic and clear treatment goals, lead to very good achievement rates in our experience.

References

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ACKNOWLEDGEMENTS AND CONTACT

The authors thanks all the multidisciplinary team that treated these patients.

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