

#582 NEXT GENERATION TRANSANAL IRRIGATION: USING PATIENT-REPORTED DATA TO BETTER UNDERSTAND DISEASE, IMPROVE IRRIGATION PARAMETERS AND PERFORM BETTER CLINICAL TRIALS

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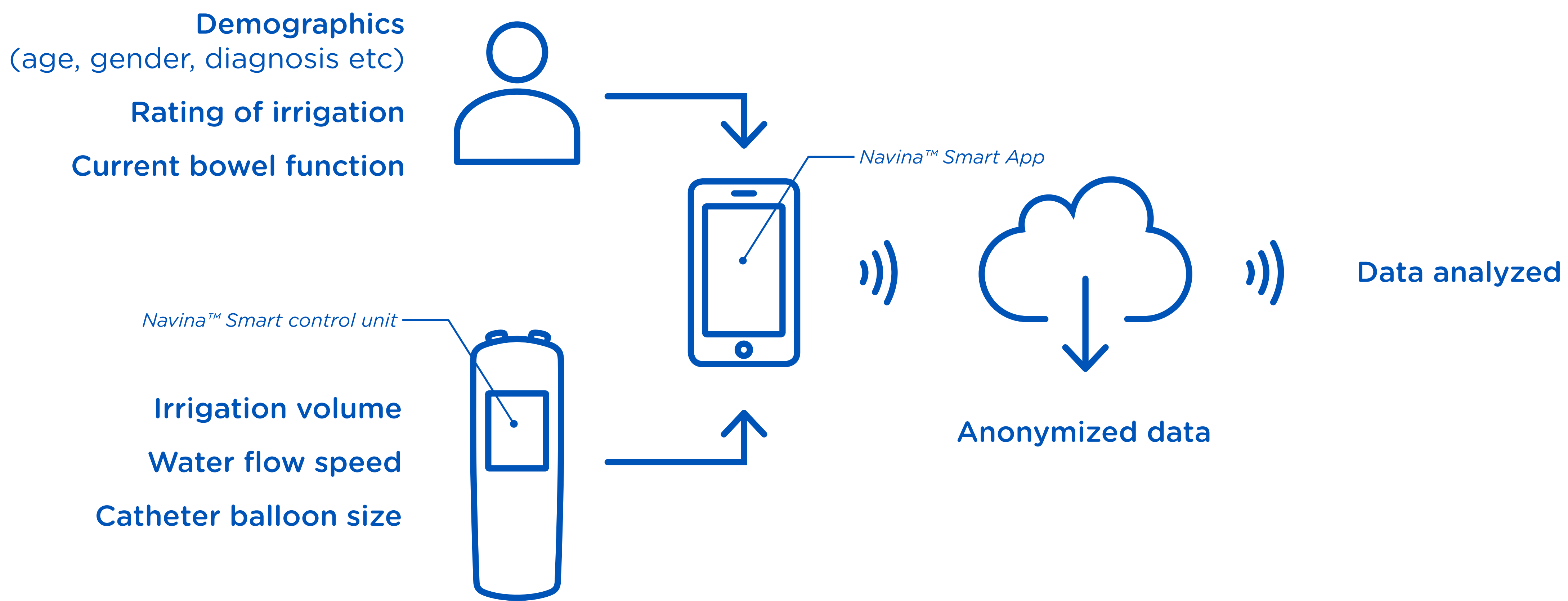
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Background: Transanal irrigation (TAI) is an established therapy for patients with both neurogenic and idiopathic bowel dysfunction, specifically presentations with constipation and faecal incontinence. Adherence to the therapy is a challenge and varies between conditions from 45-75% at 3 years, with most groups having significant drop off in the early stages of training. The reasons for this loss of adherence or failure to respond are not known, but may include disease-unrelated factors such as difficulty handling the device and inability to relate irrigation outcomes to actual irrigation parameters. We present a data base, demonstrating the range of data that can be elicited from the TAI device Navina™ Systems and the associated technology, which may help address some of these factors.

Aim: We speculate that this data may produce clinical opportunities to more clearly help with start-up and maintenance irrigation schedules for individual patients, outlining further clinical trials and indicate differences in usage between different indication groups.

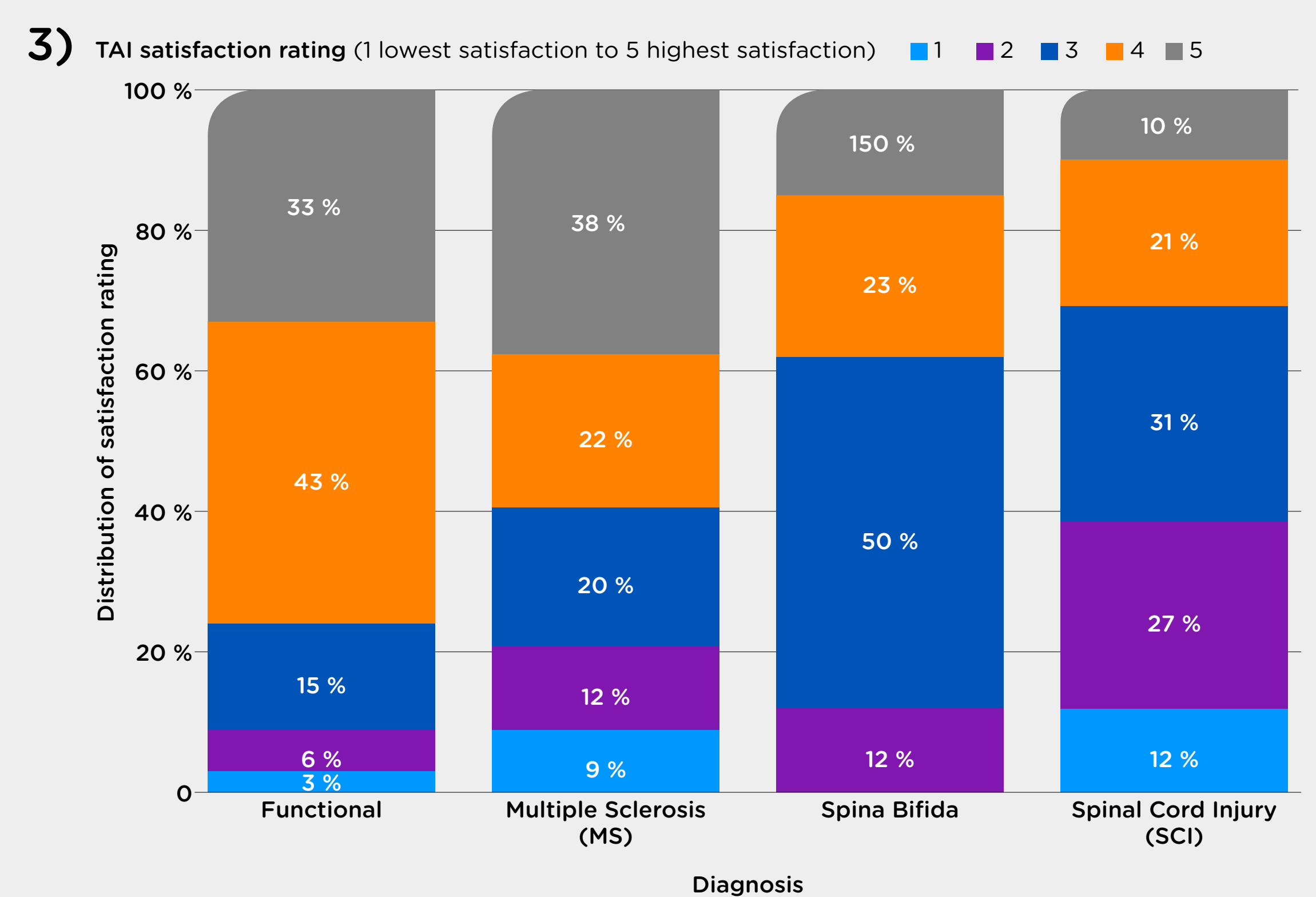
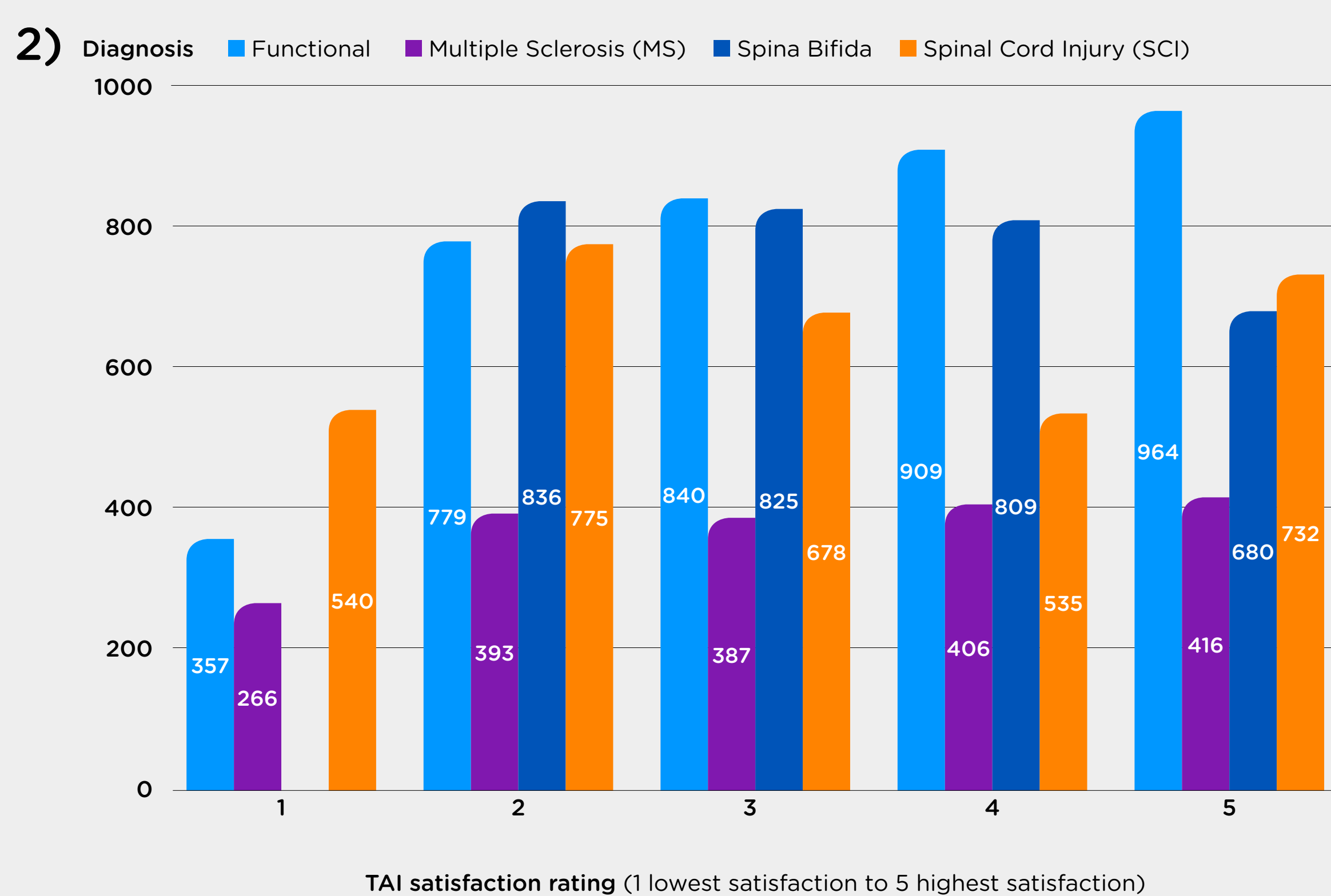
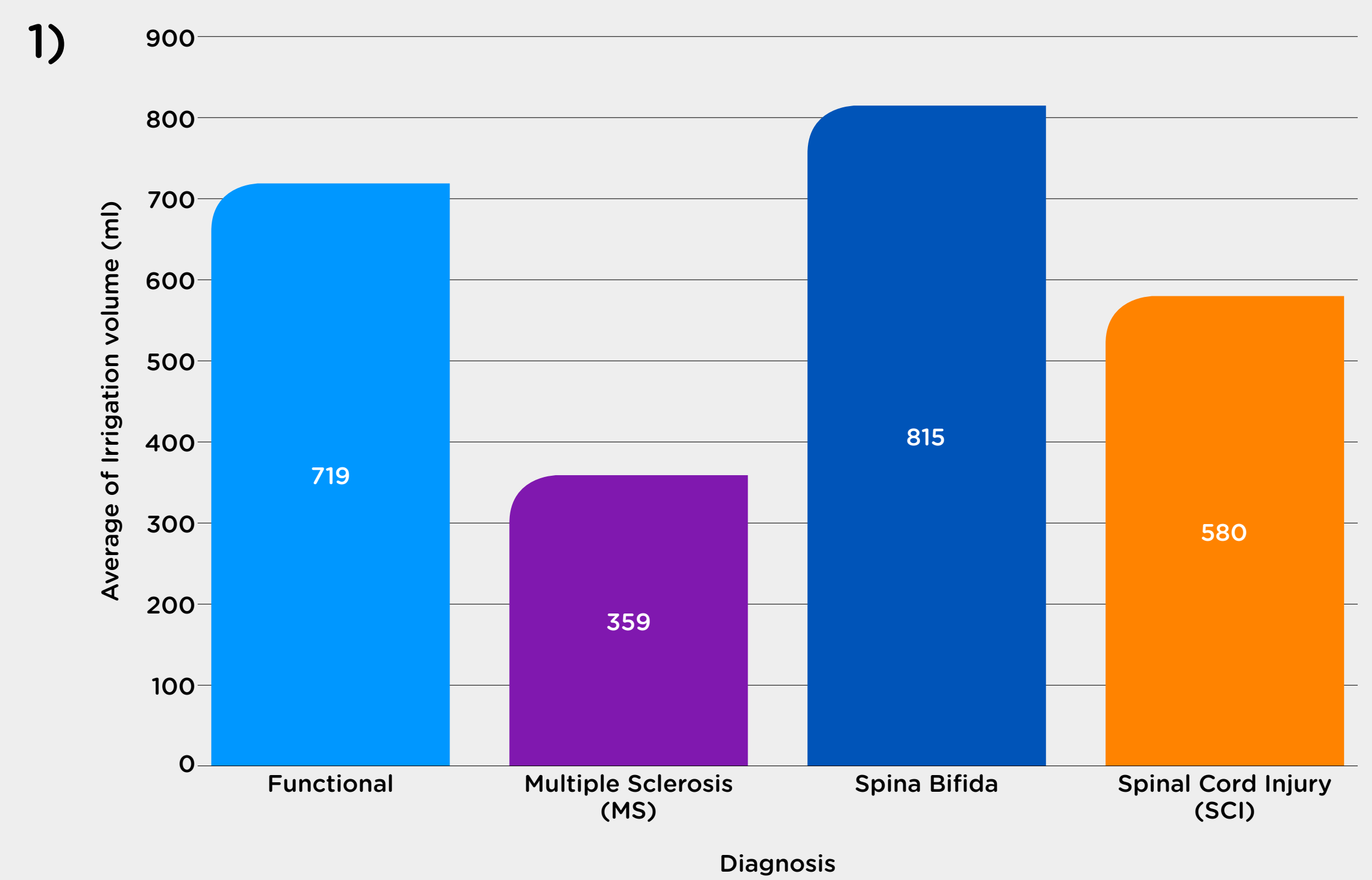
Materials and methods



Results

Examples of different data obtainable by Navina Smart data

- 1) Average irrigation volume used in TAI by different diagnosis.
- 2) Irrigation volume dependent on satisfaction rating and diagnosis.
- 3) Distribution of satisfaction rating of irrigation dependent on diagnosis.



Discussion

With the data continuously collected and with new users being added, there is an opportunity to investigate what people actually are doing when they irrigate. Specific irrigation factors such as the volume of water used, the duration of each irrigation episode, balloon size, frequency and rate of irrigation can all be analysed. This allows comparison between groups to identify the optimal ranges for irrigation parameters (balloon volume, irrigation volume, infusion rate, etc) according to indication. This may give insights into the pathophysiology of bowel dysfunction, for example looking to see whether cauda equina lesions have a more flaccid bowel compared to supraconal patients, in terms of irrigation or

balloon volume. It is also possible to compare how patients rate their satisfaction with what they are doing in their irrigation and thus identify any clinically relevant relationships for optimal irrigation parameters for different disorders, ages and gender.

Conclusion

Big data sets identifying irrigation parameters may allow better “prescribing” of irrigation regimes according to indication to start TAI. They allow the opportunity to better understand pathophysiology of bowel dysfunction, and to monitor therapy in future clinical trials.