

Figure e-1

CART2. Classification and regression tree advanced analysis investigating interactions between dose characteristics: Time to first mobilisation (TTFM), median daily number of out of bed sessions per day (frequency) and median daily out of bed activity session time (Amount), and odds of a favourable outcome (mRS 0–2).

Note: Frequency is derived from nursing and therapist data. Amount (minutes) is derived from physiotherapist data only.

The model performed well with ‘training’ and ‘testing’ Receiver Operating Characteristic (ROC) of 0.78 and 0.69 respectively. The relative importance of each characteristic was frequency (100%), daily amount (32.4%) and time to first mobilisation (27.6%). CART 2 shows that frequency is an important splitter in the model, with higher frequency and lower amounts generally associated with better outcome.

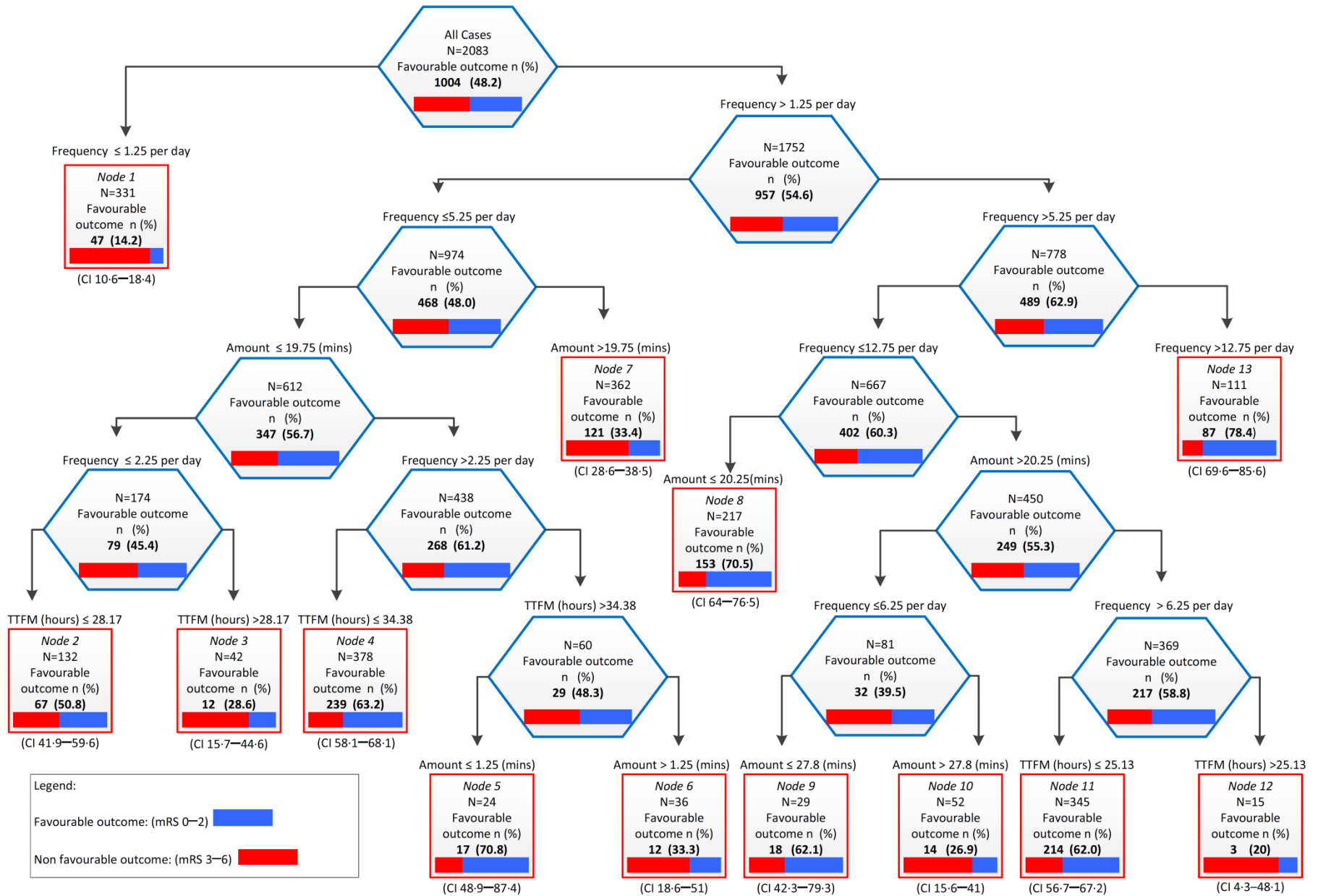


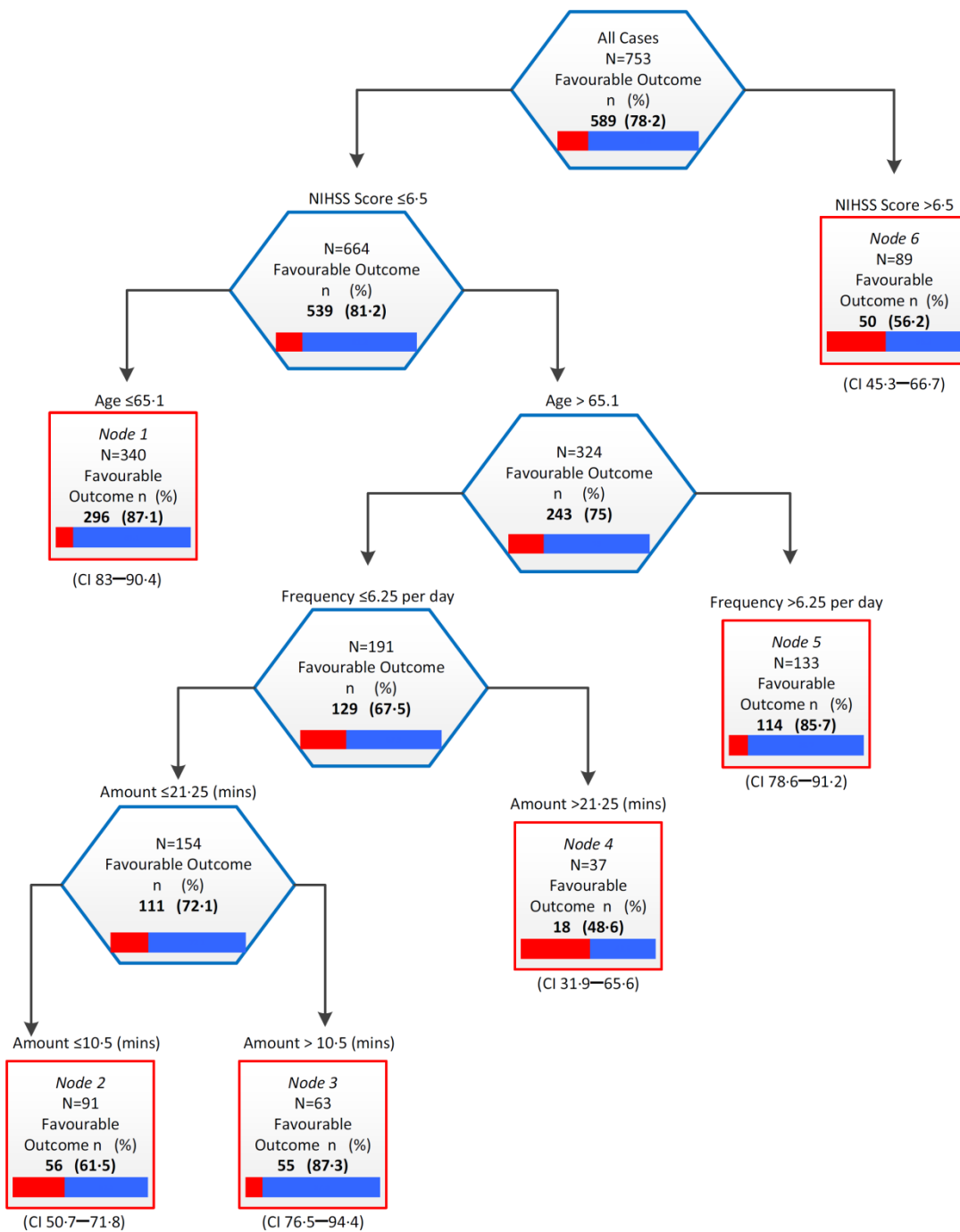
Figure e-2

CART3. Further exploration of Terminal node 1 from CART1 (NIHSS score ≤ 7.5 , age ≤ 76.3 years). This CART investigates interactions between dose characteristics: Time to first mobilisation (TTFM), median daily number of out of bed sessions per day (frequency) and median daily out of bed activity session time (Amount), and age, baseline NIHSS, stroke type, rtPA treatment on favourable outcome (mRS 0–2).


Note: Frequency is derived from nursing and therapist data. Amount (minutes) is derived from physiotherapist data only.

The ‘training’ and ‘testing’ Receiver Operating Characteristic (ROC) were 0.68 and 0.60 respectively. Relative importance of each characteristic: frequency (100%), NIHSS score (99.5%), daily amount (84.0%), age (83.4%), infarct/haemorrhage (10.3%) time to first mobilisation (TTFM 3.9%) and VEM group (2.8%).

CART3 shows that higher frequency and lower amounts as important splitters in the model.



Legend:

Favourable outcome: (mRS 0–2) 


Non favourable outcome: (mRS 3–6) 

Figure e-3

CART4. Further exploration of Terminal node 8 from CART1 (NIHSS score > 7.5). This CART investigates interactions between dose characteristics: Time to first mobilisation (TTFM), median daily number of out of bed sessions per day (frequency) and median daily out of bed activity session time (Amount), and age, baseline NIHSS, stroke type, rtPA treatment on favourable outcome (mRS 0–2).

Note: Frequency is derived from nursing and therapist data. Amount (minutes) is derived from physiotherapist data only.

The ‘training’ and ‘testing’ Receiver Operating Characteristic (ROC) were 0.81 and 0.71 respectively. Relative importance of each characteristic: NIHSS score (100%), frequency (95.5%), age (44.6%), time to first mobilisation (TTFM 27.4%), VEM group (20.6%), daily amount (5.7%), infarct/haemorrhage (2.5%).

CART4 shows that higher session frequency is associated with higher proportion of patients with a favourable outcome. Lower dose in Usual Care group appears in the tree, with more favourable outcome in those mobilising > 2.75 times/day.

