**Study plans**

We will invite 500 adults who have emotionalism at any time in the first nine months after their stroke to take part in the trial. Half who say yes will be randomly allocated (as if by the toss of a coin) to take the antidepressant for six months; the other half will take a placebo. A placebo is a pill that looks like the real medicine but contains no active ingredient. Participants will not know if they are taking the antidepressant or the placebo, nor will we. We will recruit people from the UK and Australia. Participants will be 18 years or older, have had a stroke and have developed emotionalism. We will measure the presence or absence of emotionalism at six months, when the trial medication is finished. We will also ask about mood, quality of life, thinking skills and social functioning and any health problems during the trial.

Once the trial has ended we will publicise the results. We will host talks with stroke survivors, carers and families and share results via social media and a website. We will publish findings in scientific journals and at scientific meetings. We will inform government, stroke charities, research funders and healthcare organisations about whether sertraline treats emotionalism after stroke to influence future clinical guidelines.

Our PPI co-applicant who has lived experience of stroke and emotionalism will convene a Lived Experience Advisory Forum (LEAF). This way others with lived experience of stroke and emotionalism can become involved. We will offer inclusive PPI opportunities. If you would be interested in being in our LEAF if we do get funding, please let us know when we talk.