## <u>Case study – Telestroke</u> East Lancashire Hospitals NHS Trust

## Author – CS, Communications officer

ON a Sunday afternoon, MN suffered a stroke which left her unable to speak and with almost no control over her left arm and leg.

But just 48 hours later, the 48-year-old mum-of-two was back at home with full use of her arm, only slight weakness in her leg, and was able to tell us all about her experiences.

M received clot-busting thrombolysis drugs, which in certain circumstances can reverse the effects of stroke. The hard-hitting treatment can, however, be extremely dangerous if the patient has suffered any kind of haemorrhage, so a highly-specialist senior consultant is needed to give a full assessment before the treatment can be authorised.

M, who lives near Accrington, was the first patient ever at East Lancashire Hospitals NHS Trust to receive thrombolysis without a consultant in the room. She was assessed via videolink as part of the new Telestroke collaborative – her consultant was at his home, ready to respond to requests for thrombolysis assessment from all over Lancashire and Cumbria.

She said: "I was at my friend's house helping her paint and decorate, and we had just got back going after stopping for a brew. Someone asked me to pass them a paintbrush, and I tried to say something back but I just couldn't get my mouth to work. The words wouldn't come out.

"Everyone laughed at first, thinking I was just having 'blonde' moment, but then they realised something was seriously wrong and called for an ambulance. My friend got me outside and sat me down because I could feel my left arm and leg going really weak. That's when the paramedics arrived.

"When I heard them say in the ambulance that they thought I'd had a stroke I just started to cry. I care for elderly and disabled people for my job, and I've seen the really devastating effects of stroke. I kept thinking 'that's me now'. I was really scared.

"When I got to the hospital there was no messing about at all. I was surrounded by people and it wasn't long at all before thrombolysis was mentioned; I was asked whether I'd like to try it. I was taken away for a CT scan and by the time I got back they were setting up the TV screen.

"The doctor appeared on the screen, introduced himself and talked about my CT results with the doctor who was in the room with me. He talked to me from the screen, asking me to try different movements, then the doctors talked about the amount I'd need and how it should be given to me.

"I had an injection first then most of the dose was put in through a drip. I was absolutely gob-smacked at how fast it worked – it was amazing. Within half an hour my speech started to come back. I'd not been able to work my left arm at all but then the feeling started to return in my hand and I could wiggle my fingers. By the next morning my leg had started to work again too.

"I spent a night and a day on the stroke ward, and when my daughter Z came to see me on Tuesday afternoon I was ready to go home. My short-term memory still isn't great and my leg still feels heavy, but otherwise I'm OK. The Stroke Association and the East Lancashire Stroke Team are working with me to help me continue recovering and hopefully get back to work.

"I feel incredibly lucky – the treatment I had doesn't work for everyone, and it has to be given within a really short time after the stroke. I would still be in hospital now if I hadn't had it.

"Everybody at the hospital and in the ambulance was absolutely fantastic. They all put me at my ease, and I felt really well looked-after throughout. I tried to thank everybody at the time, but I'd like to say so again – I really can't thank them all enough."

Daughter Z, 18, who was with M when she suffered her stroke and accompanied her to hospital, said: "It was really frightening to hear that Mum had suffered a stroke, and I was preparing myself for her to be in hospital for a long time.

"I was amazed when they said she could come home so quickly – I hadn't even cleaned up!"

Coincidentally, the consultant on call that day was Dr R, from East Lancashire Hospitals. He said: "It was really nice that I was able to administer the Trust's first Telestroke assessment, but it could have been a consultant from any of the hospitals in the collaborative – just after I had seen M, another call came in from Southport for me to assess a patient there.

"Assessment using a videolink is actually very similar to doing it face-to-face. The system is just like using Skype, and the only difference from a face-to-face consultation is that you rely on the doctor who's in the room with the patient to carry out sensation and movement tests.

"Thrombolysis is a great treatment for the 10-15% of stroke patients that it is suitable for, as long as it is given very soon after the stroke has happened. However it is vital that the patient is assessed by a very senior doctor to ensure the treatment is suitable, and the national shortage of specialist stroke consultants has meant most hospitals have only been able to offer it during normal weekday working hours.

"The Telestroke system has been two years in the planning, as a team effort between all members of the Lancashire and Cumbria Cardiac and Stroke Network. By pooling our resources and taking advantage of new technologies, we can now ensure that every suitable stroke patient gets this fantastic treatment, wherever they are in the region and whatever time of day their stroke hits.

"The work of the Cardiac and Stroke Network in introducing this system has been absolutely fantastic, and is a real example of what can be achieved when we all work together across geographic boundaries. I'm sure there will be many other specialties trying similar ways of working in future to make the best treatment available at all times."