

Stroke Telemedicine Newsletter 1 Aug 2011

Over 140 stroke telemedicine cases!

Cambridge University
Hospitals NHS Foundation
Trust

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- © And finally.....a very well done and a BIG thank you to all of you for your commitment and hard work — keep it up!

This is the first in a series of regular newsletters aimed at keeping everyone updated on the **Stroke Telemedicine System**.

To date, since November 2010, over 140 patients have been assessed using the telemedicine system for stroke management. Just under 40% of patients were thrombolysed following remote advice from the Stroke Consultant.

There are currently 14 hospitals across the region providing 24/7 thrombolysis care. Of these, 7 hospitals are at Level One — running their own in-house stroke thrombolysis rota and 7 hospitals are at Level 2, which is part of the regional telemedicine rota.

The most recent hospitals to join the Level 2 rota are:

- Lister Hospital, Stevenage
- Queen Elizabeth Hospital, Kings Lynn
- West Suffolk Hospital, Bury St Edmunds

The next hospital to join is the **Princess Alexandra Hospital** in Harlow, who will also be joining the Level 2 rota later this year.

As we have more hospitals joining at Level 2, there will also be more Stroke Consultants joining the on-call rota. Initially these new Stroke Consultants will 'buddy up' with an existing Stroke Consultant until they feel fully familiar to undertake telemedicine calls on their own. I will of course keep you all updated as the new Stroke Consultants join the rota.

New faces – Lynda Sibson & Jim Bibby

I have been appointed as the new Telemedicine Project Manager, and started my new role in April 2011 and work part-time **Monday—Thursday**.

I will be visiting all of the telemedicine sites over the next few weeks—so if I have not been in touch with you as yet, I will be doing so shortly.

I will also be organising the Stroke Consultant's on-call rota and I have been emailing this rota out to the Superuser's at the beginning of each week. Any queries/questions, please do not hesitate to contact me. I am based at Addenbrookes hospital and



My contact details are as follows:

Email:

Lynda.Sibson@addenbrookes.nhs.uk

Jim Bibby— Jim is the other new member to the Telemedicine Team. Jim is currently the **ICT Strategy & Special Projects Lead** at the EoE SHA.

The SHA have kindly 'loaned' Jim to the Telemedicine Team for 2 days per week and we ensure that we utilise that time as effectively as we can.

Jim will often be joining me on visits to the hospitals and can also provide specific technical telemedicine support over the phone as required.

Email: Jim.Bibby@eoe.nhs.uk

Stroke Telemedicine Awareness Day

We ran a very successful **Stroke Telemedicine Awareness Day** which was for the hospital IT support staff. The objective of the day was to provide a clinical & technical overview of the East of England Stroke Telemedicine service.

The Awareness Day aimed to ensure that all the IT staff have a good overview of not just the technical aspects but also the clinical impact of this innovative service.

We had a total of 14 attendees from all over the EoE region and we had some really positive feedback about the day—particularly with regard to the improved overview of clinical issues from an

Level One hospitals

There are seven Level 1 hospitals currently involved in stroke telemedicine across Essex and Beds & Herts.

The Level 1 hospitals provide & manage an in-house 24/7 stroke thrombolysis on their own rotas. However we are have not witnessed much usage of the telemedicine equipment by these sites and this does give some cause for concern.

The telemedicine carts, with licenses, cost an average of more than £6,000 annually and it does seem a shame that the equipment is not being used to its full potential.

I am in the process of arranging to visit these hospitals to see if I can find out what some of the barriers are and how we can overcome these.

If you have any suggestion or ideas as to how we can address and overcome these issues, please do not hesitate to contact me.

Audit Forms

I am collating all the **Audit Forms** from the telemedicine consultations and these are proving very useful in helping me to collect and review all data, which interprets into useful information for the Stakeholder Partnership, Stroke Consultants and Superusers.

I am planning to update the **On Call Consultant Audit Forms**, to gather more information regarding the patient's condition at presentation & following any treatment, such as their NIHSS score, time to scan etc. I have also added an area to identify any training and/or technical issues that arise during the teleconsultation.

Dr Pat Barry, clinical lead for stroke telemedicine and myself are keen to ensure we have up-to-date information, so there are any **outstanding Audit Forms**, please email them to me — as I am missing a few!



Amendments to the Stroke Thrombolysis protocol

The protocol for thrombolysis in stroke has recently been amended and the key changes are:

Time window —the time window for administering thrombolysis has been increased from 3 hour to **4.5 hours** from symptom onset

Age limit - there is no upper age limit (although should be clinically appropriate)

These revised amendments are based on recent evidence based research and will be adopted by the telemedicine Stroke Consultants and based against individual patients. However if you have any concerns, please discuss this with the Stroke Consultant during the consultation.

The software used for stroke telemedicine has been updated. The latest version of the software is easier and more intuitive to use and will allow you to share **just** the PACS image rather than the whole of your Desktop when you are showing the CT images to the Stroke Consultant.

This will mean that less bandwidth will be used during this time, hopefully resulting in fewer issues with regard to the system being slow or 'pixelated' which sometimes occurs.

There are less buttons to select—always good news! Jim & I will develop a timetable to come and update all sites—we will need the Superuser & local IT support person on the day. I will circulate a timetable for update shortly.

I will also be available for on-site and remote training—as I can now link in with my laptop using the software.



The key features of the new software are:

- **Files**—to upload and share Audit Forms (please remember to **delete all forms** from the Desktop once you have printed them and empty the Recycle Bin!)
- **Chat** — allows you to text-type and share any confidential and/or sensitive information between the referring nurse/Dr and Stroke Consultant. This is also useful if the A&E or ward is very busy and noisy!

IT perspective.

It was W. Edwards Deming who said "In God we trust; all others must bring data!"

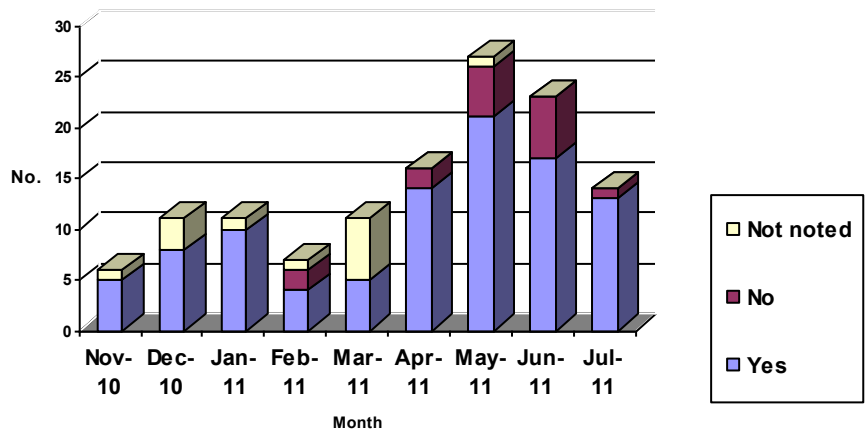
I have previously presented the data in a spreadsheet — which can get a little difficult to read and interpret. I have converted some of the data into graphs, which is rather more interesting to look at, and does give you an overview of the outcomes to date.

One aspect of interest is the appropriateness of the telemedicine calls to the multisite rota (Level 2) (see **Chart 1** below).

Chart 2 focuses on the number of telemedicine calls per site— as you can see Peterborough Hospital use the telemedicine system most frequently with Ipswich & Watford hospitals second and third highest users respectively.

This is largely due to their longevity in stroke telemedicine, and the newer hospitals to join the telemedicine service are beginning to increase their call rate as the service

Chart 1: Appropriateness of telemedicine calls



Data –from Level 2 hospitals (contd)

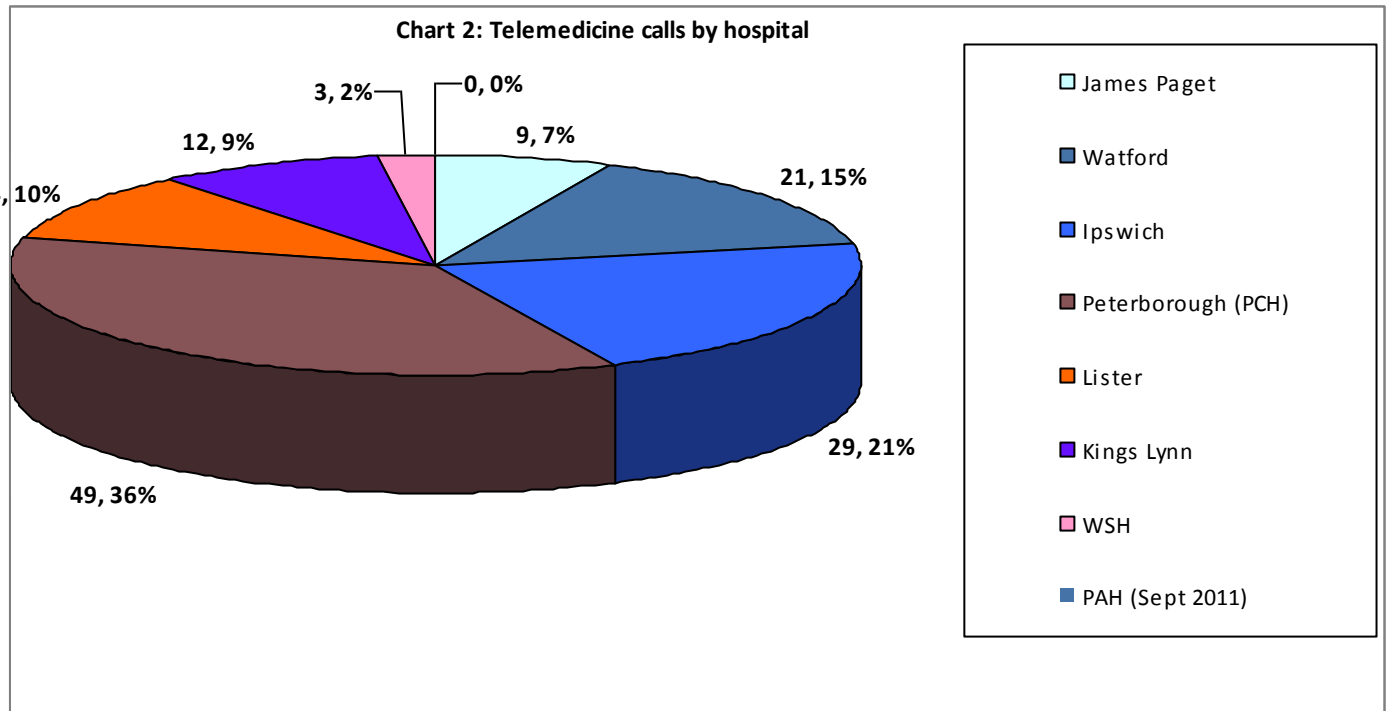
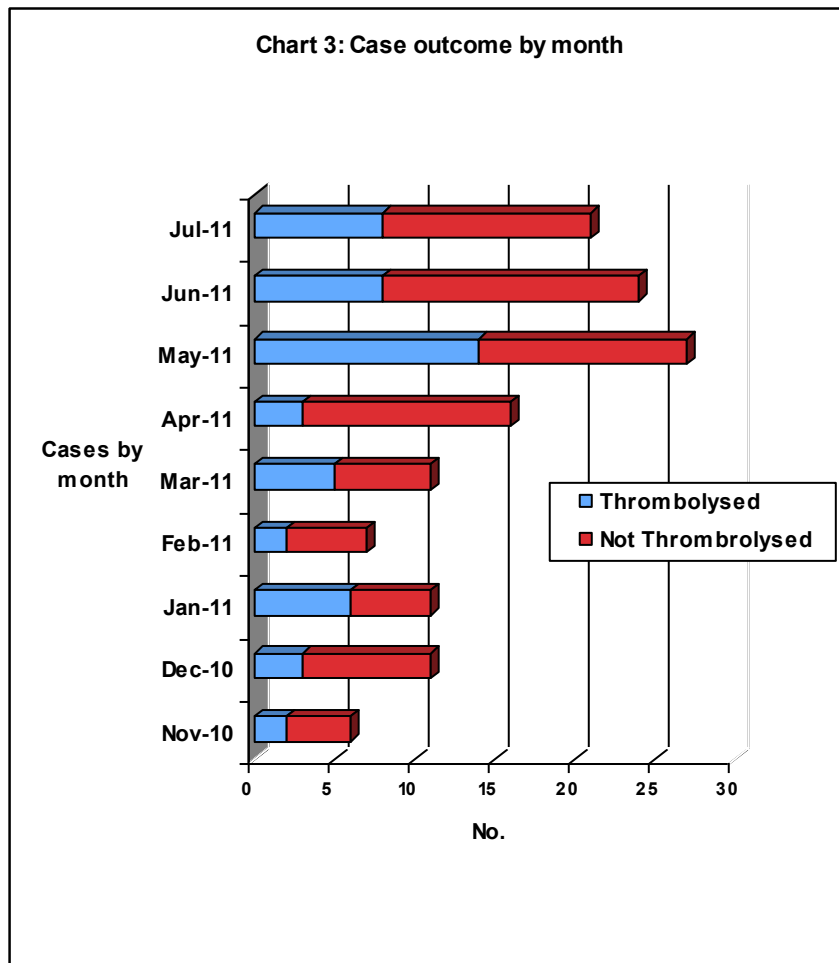


Chart 3 focuses on the case outcome by month.



Research & evaluation

We are keen to undertake further research into patients who have been reviewed and treated with telemedicine. We are particularly interested in investigating the outcomes of the patients who were not thrombolysed, or who were later diagnosed with a stroke—perhaps a stroke mimic for example.

We are fortunate to have Dr. Smriti Agarwal, Clinical Research Associate, to assist us with some of this more detailed research.

I am planning to have a monthly **videoconference with Superusers** who have had a particularly interesting or complex patient, identified either through the Audit Forms, or by the Stroke Consultants. We will start to investigate some of the factors relating to the patient outcomes.

I plan to start the videoconferences in September-so that we can start to review some of the implications of stroke telemedicine.