

SW London Hub and Spoke Thrombolysis model

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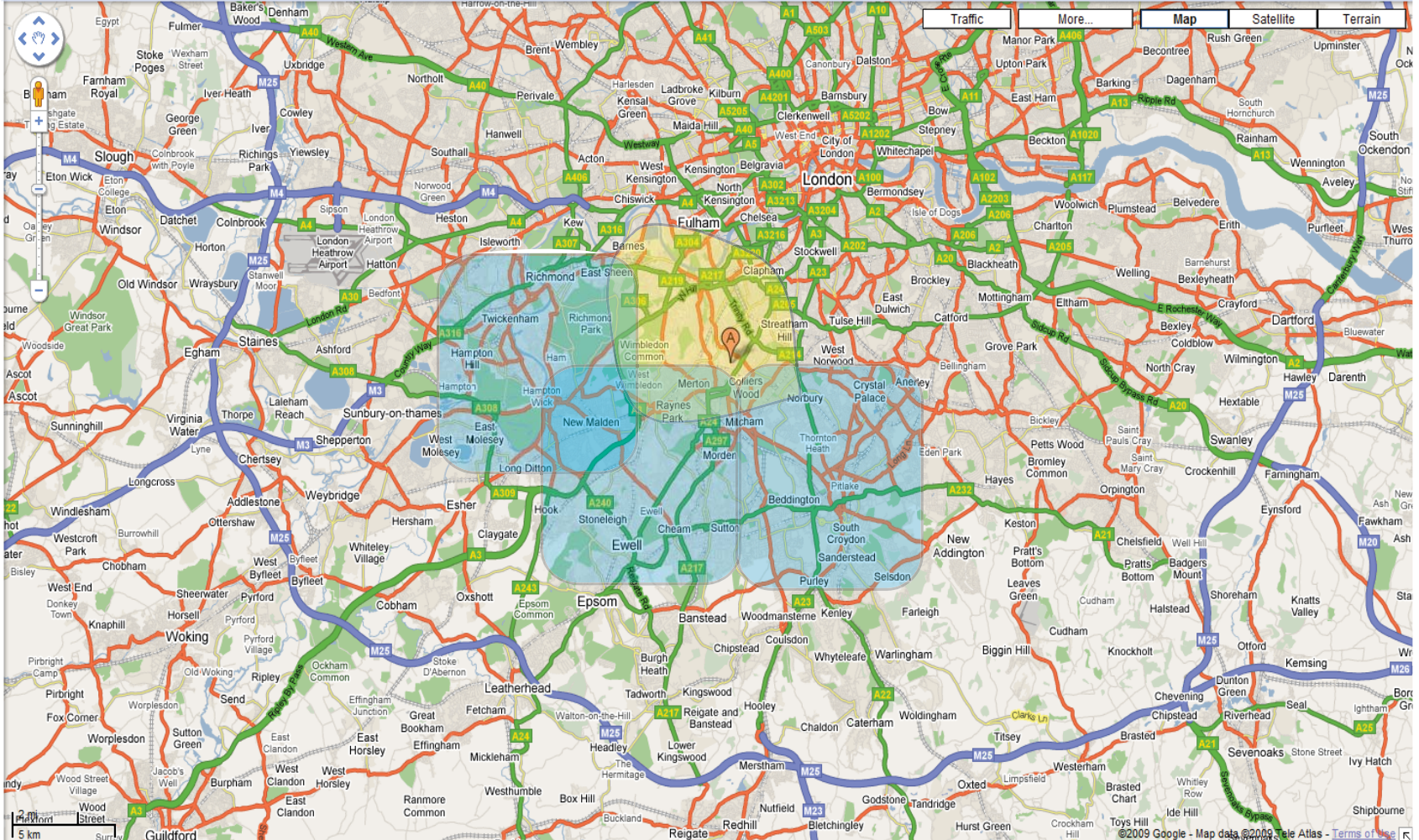
24 hr local thrombolysis

Feb 2009

Hub and spoke model introduced

Hub and spoke model

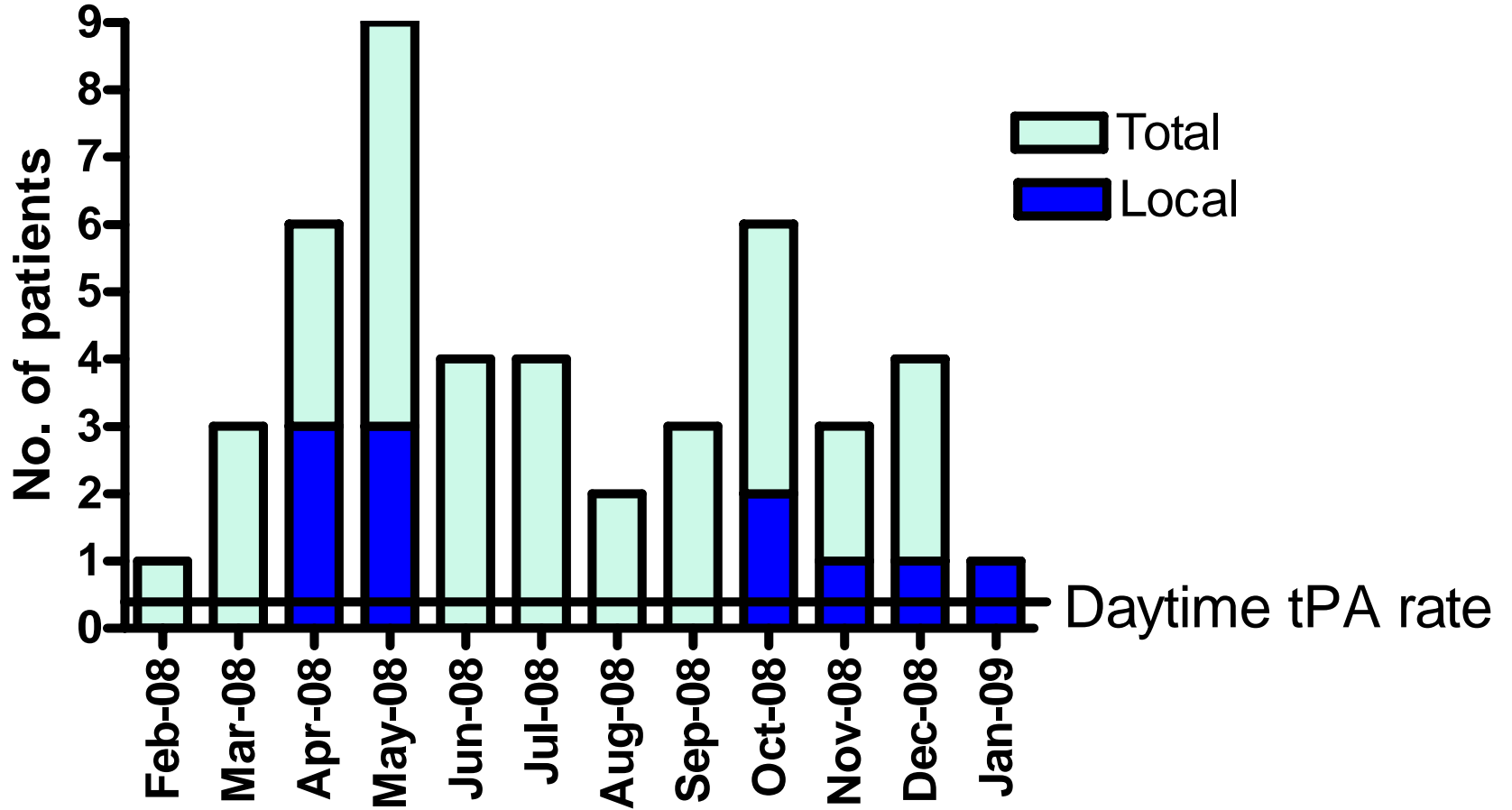
- Day time thrombolysis established at
 - Mayday
 - St Hellier
 - Kingston
- Out of hours thrombolysis via St George's
 - all weekend
 - 17.00-9.00



Over 1 year

- 771 patients admitted to SGH
- 10% increase in admissions
- 15% of all admissions “non-stroke”
- Higher rate in regional referrals
- 52% of regional patients from one of nominated spokes – rest not

No thrombolysed per month



Hospital	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Total
St George's	1	3	6	9	4	4	2	4	5	3	4	1	46
Kingston	1	1	0	1	2	0	1	2	3	1	2	0	14
Mayday	1	1	1	1	1	2	1	0	0	0	1	2	11
St Hellier	0	1	0	1	2	1	0	1	0	0	1	0	7
Total	3	6	7	12	9	7	4	7	7	4	8	3	78

Patient details

- Mean age :
 - local 9-5 80 yr
 - Local out of hours 69.2
 - Regional out of hours 72.5
- Male :
 - local 9-5 40%
 - Local out of hours 50%
 - Regional out of hours 56%

Patient details

- Mean from stroke to A and E
 - local 9-5 82 +/- 23 min
 - Local out of hours 68 +/- 7 min
 - Regional out of hours 74 +/- 5 min

Door to needle

The median time was 55 minutes with a range of 26 minutes to 2 hours 55 minutes and mean time of 61 minutes

No difference for Regional or local patients

- non-significantly lower for regional patients

6 month data

349 patients were admitted with possible stroke.

41% were regional patients.

77/349 were non-stroke diagnoses.

98/349 people met initial screening criteria for suitability for thrombolysis
68/98 were regional patients and 56/68 were assessed as part of the network

12/68 presented during normal working hours.

9/56 were non-stroke diagnoses.

27/98 patients were thrombolysed, of which 22 were regional diverts (1 was diverted during normal hours).

6 month data

Of these 22 regional thrombolysed patients, 11 were discharged home, 3 died and 8 repatriated.

Median delay to repatriation was 2 days (mean 2, range 1-7).

Patient feedback

- The following conclusions were drawn from the study:
 - Overall patients and carers did not seem concerned about where patients received treatment, only that it was the best treatment available.
 - The additional travel caused by the patient's admission to the hub hospital did not appear to have caused problems for family and friends.
 - Explanations given to patients at admission and transfer stages of the pathway could be improved.
 - Patients and carers were concerned about lengthy waits on the day of transfer back to the local hospital.

Positives

- Thrombolysis available to patients who were not receiving it previously
- Thrombolysis rates increased
- Patients were happy with a regional service
- Ambulance transfer times from DGHs were similar for SGH local and regional patients

Negatives

- Ambulances found different referral practices at different times difficult
- Some patients taken to hospitals when not offering thrombolysis – had to be re-transferred to SGH
- Occasions where thrombolysis not available in DGHs during working hours
- **This resulted in suitable patients not being in right place to receive thrombolysis**
- Thrombolysis rates did not pick up as much as we would like

Conclusions

- Hub and spoke was a good interim model
- Thrombolysis more available than it was previously
- Problems occurred with splitting day and out of hours service
- Optimal configuration is to have all thrombolysis in 24/7 centres