



London Ambulance Service



NHS Trust

The (very ill) English Patient

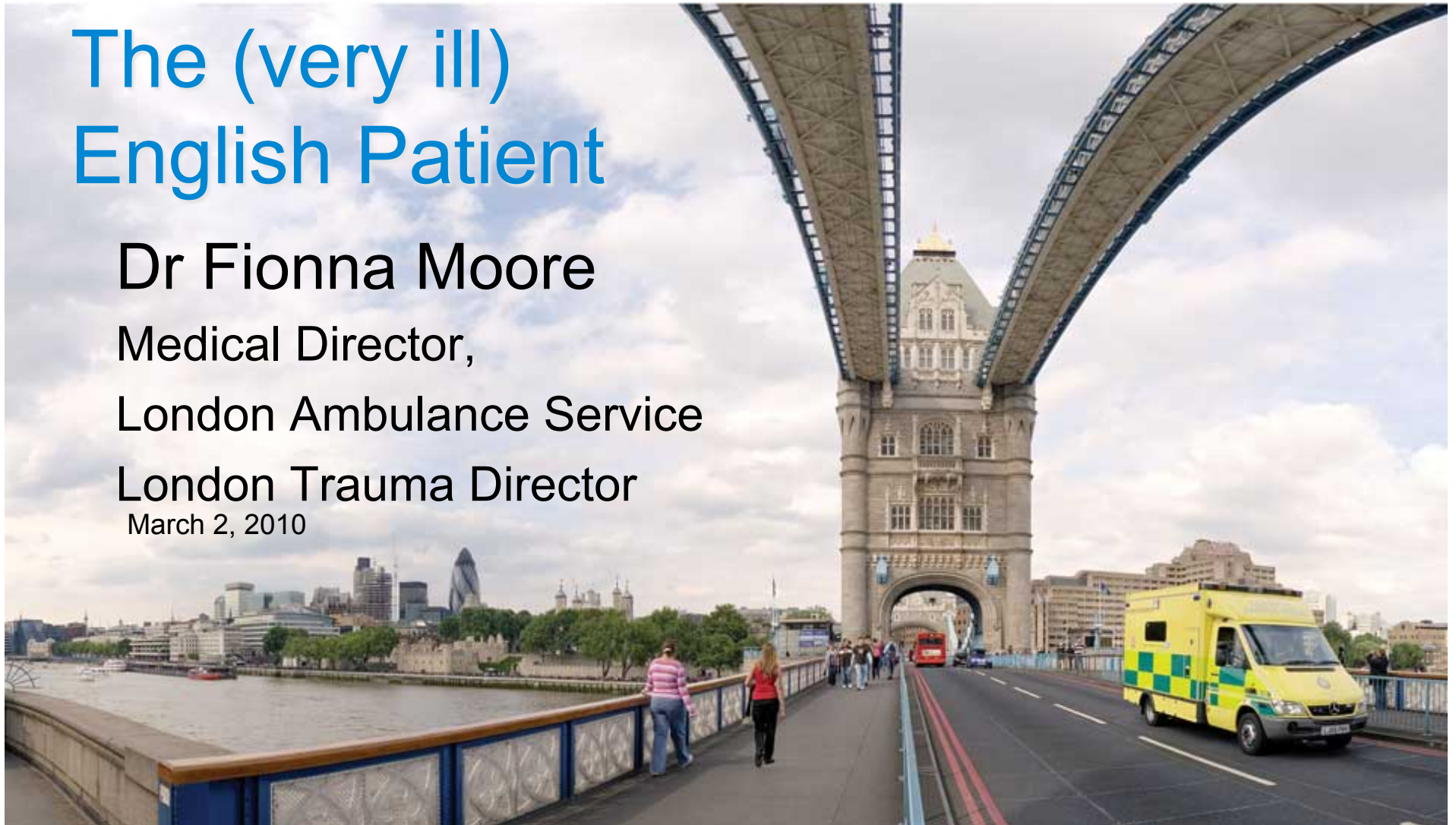
Dr Fionna Moore

Medical Director,

London Ambulance Service

London Trauma Director

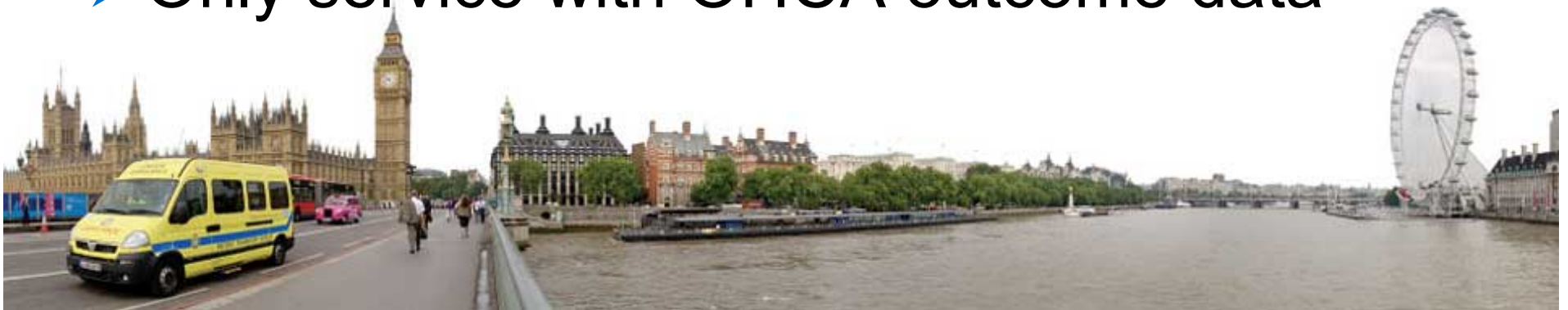
March 2, 2010



The context

Busiest free ambulance service in the world

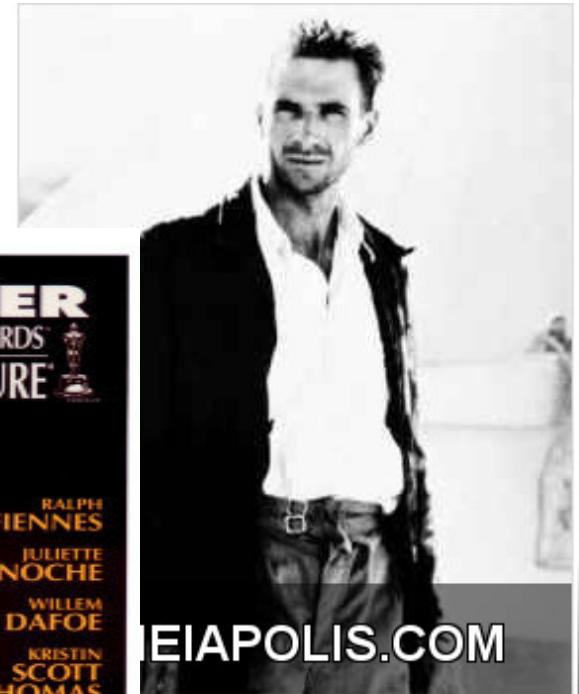
- Only statutory provider in London
- Part of the National Health Service
- 4,000 calls a day
- Over 900 immediately life threatened calls
- Covering > 620 sq miles
- Only service with OHCA outcome data



LAS Operational Structure

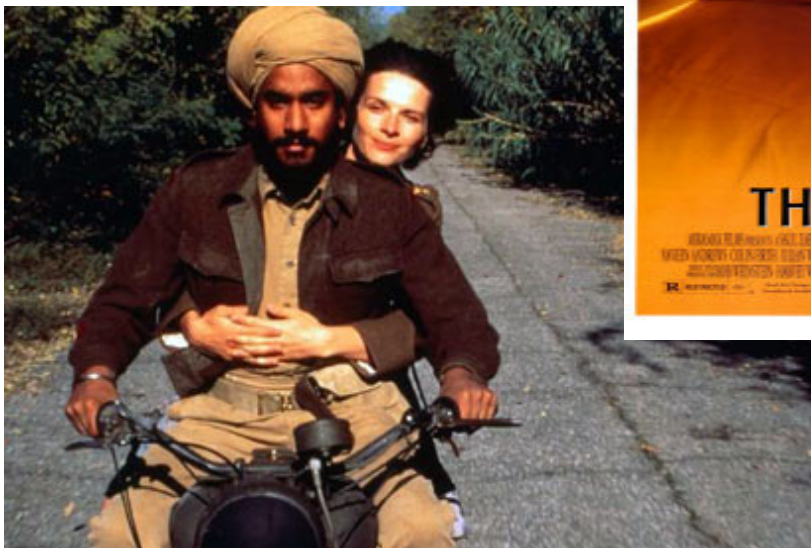






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LAS - the reality



Demand management of the critically ill and injured

- Overall demand increasing 3-5% per annum
- Targets get tougher (call connect)
- Hospital handover times increasing – impacting on vehicle availability

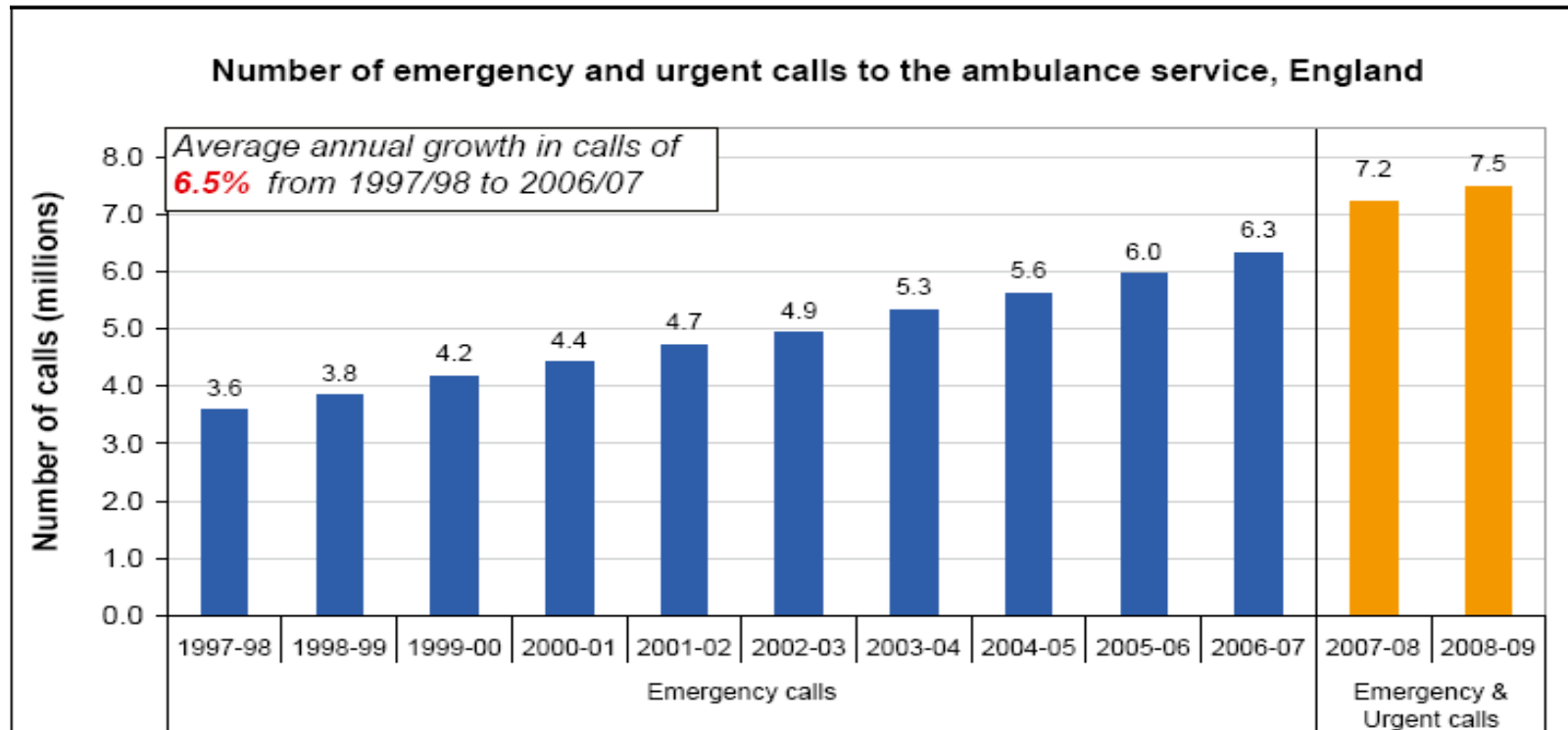


Demand management of the critically ill and injured

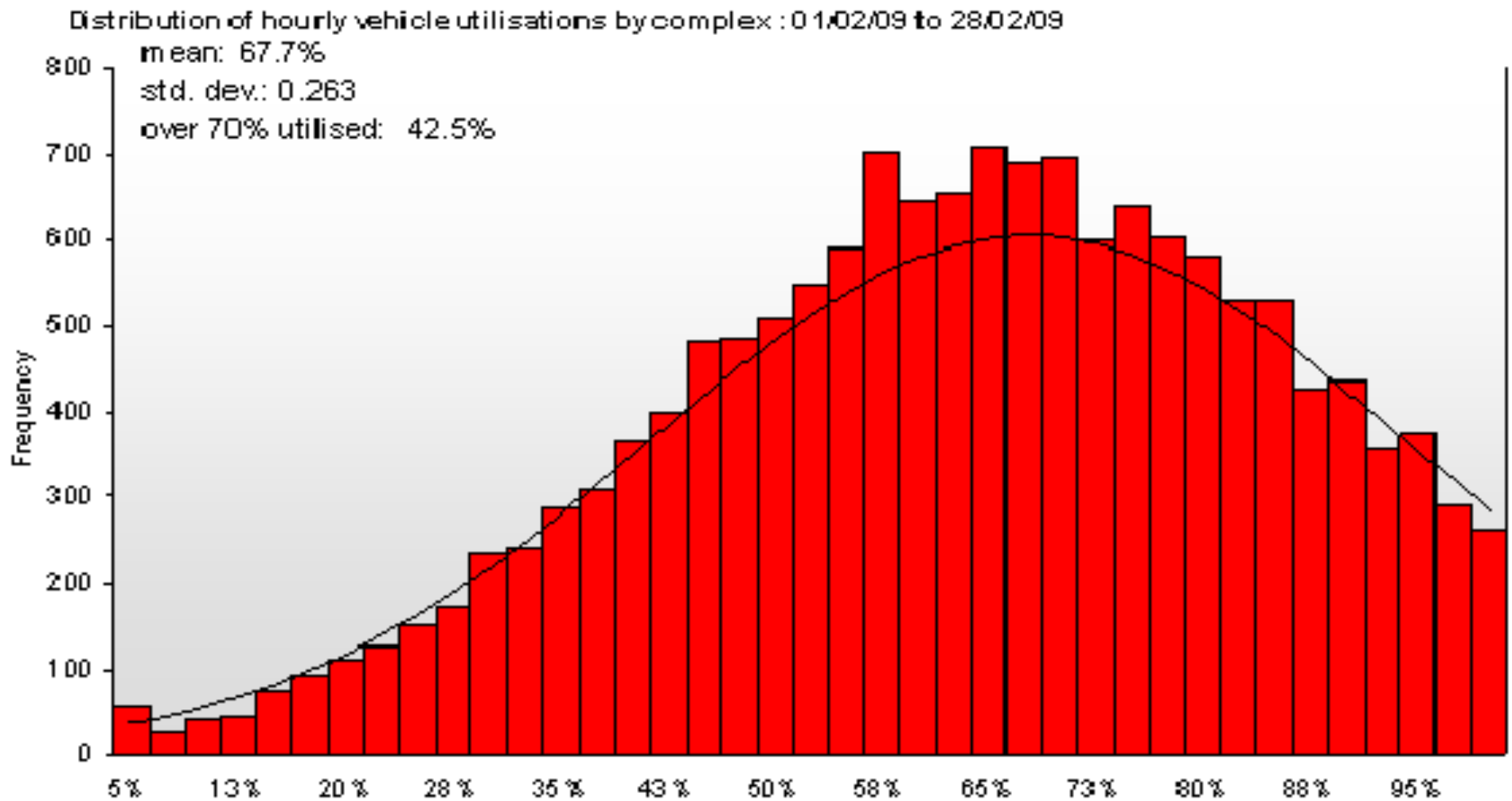
- Darzi review - local care where possible; specialised care where appropriate
- Specialist units – always the usual suspects (major trauma, stroke, PCI, vascular)
- Generally located in Central London



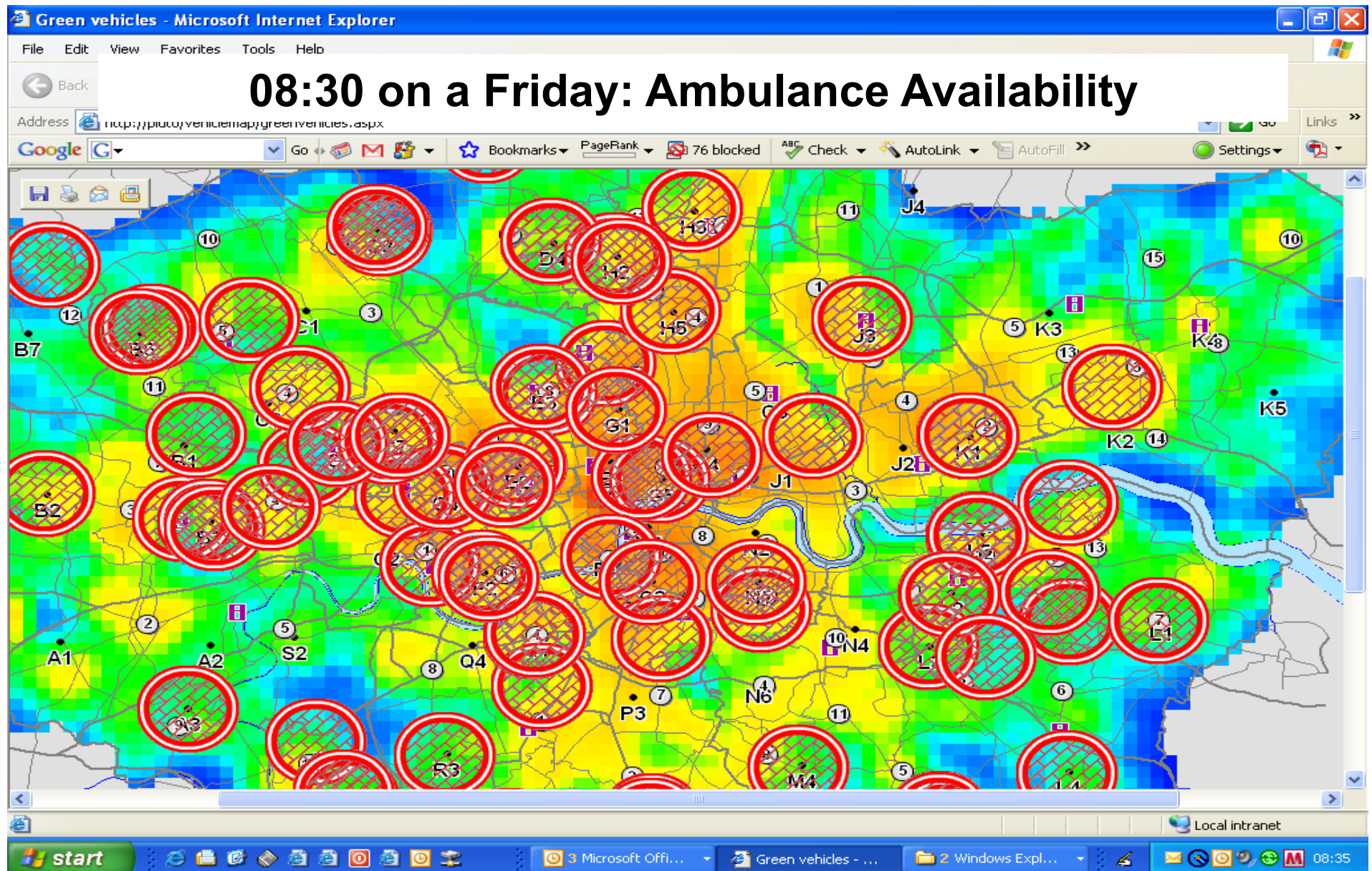
Increasing demand



Utilisation (Dec 2009)



Resource limitations



Resource limitations

Green vehicles - Microsoft Internet Explorer

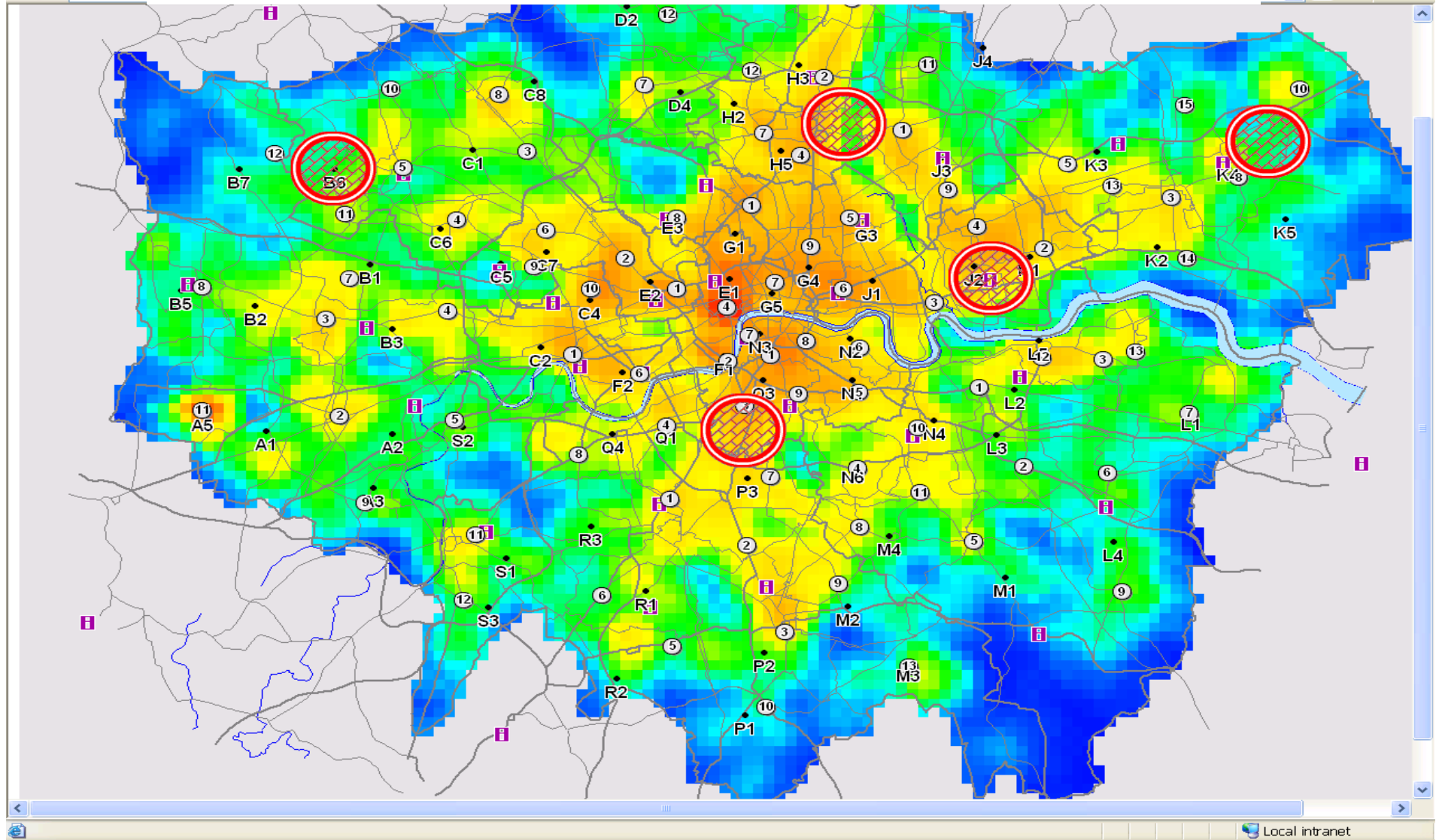
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Address <http://pl>

01:35 on a Sunday: Ambulance Availability

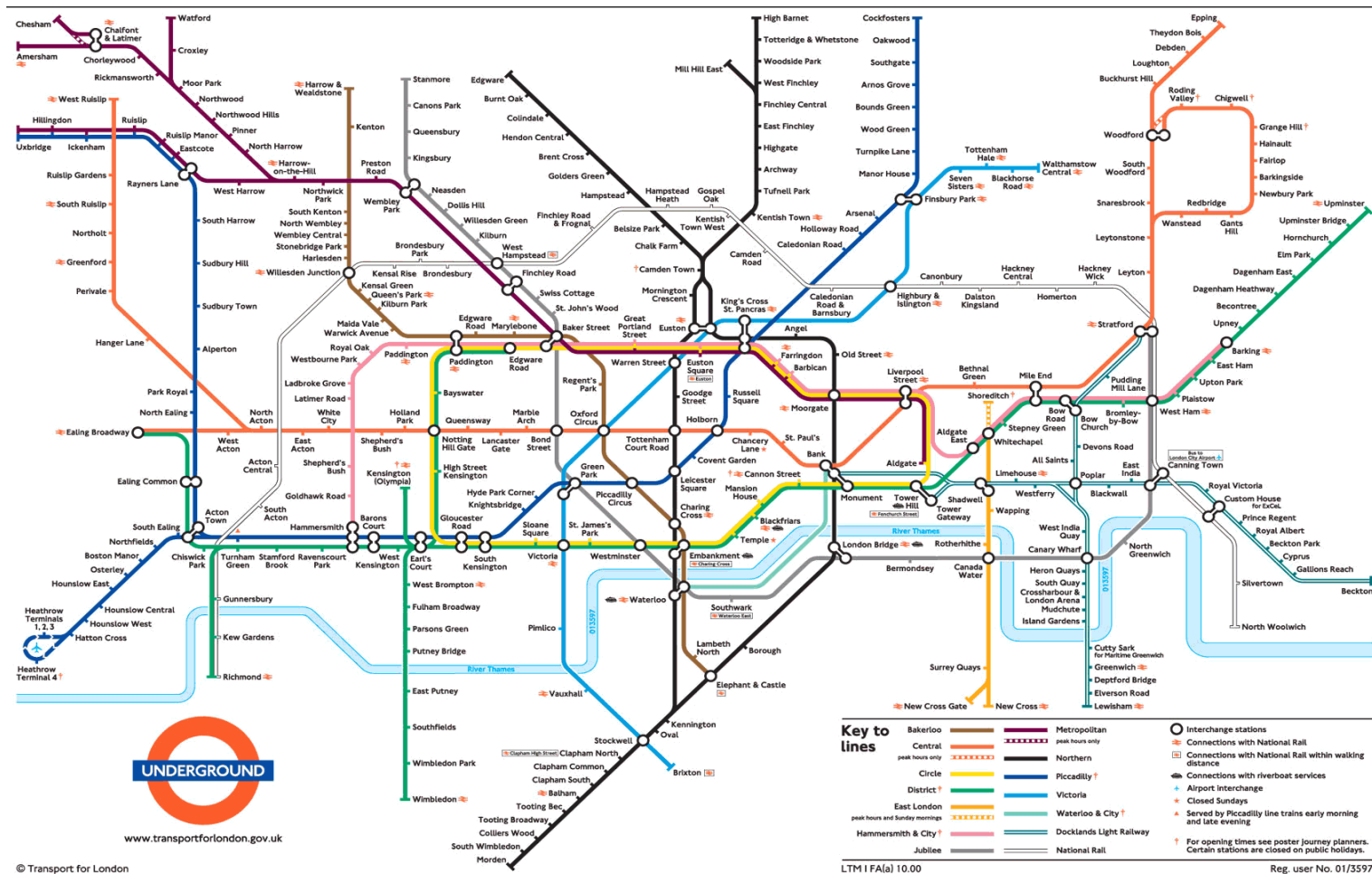
Go Links



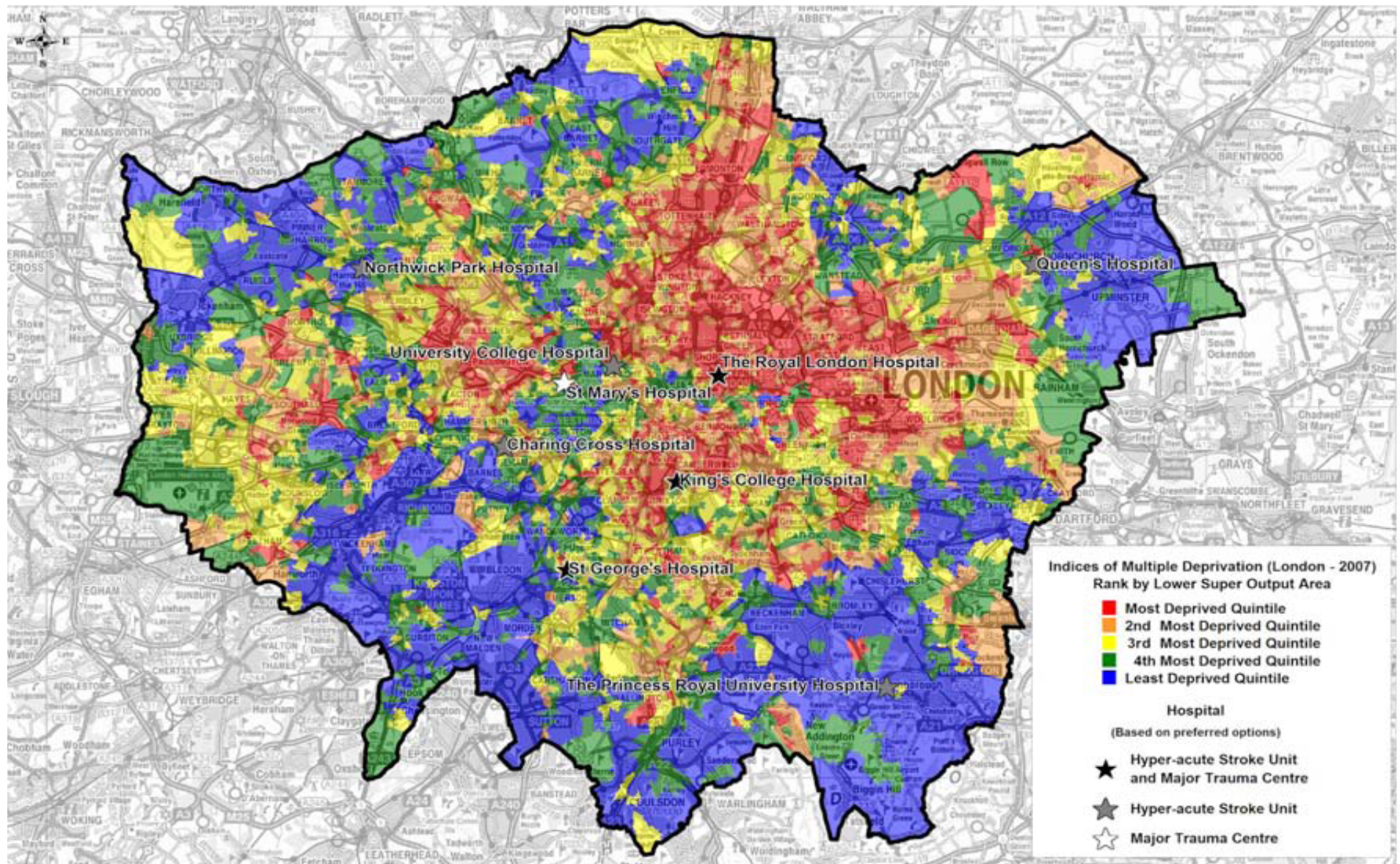
Changing Healthcare in London



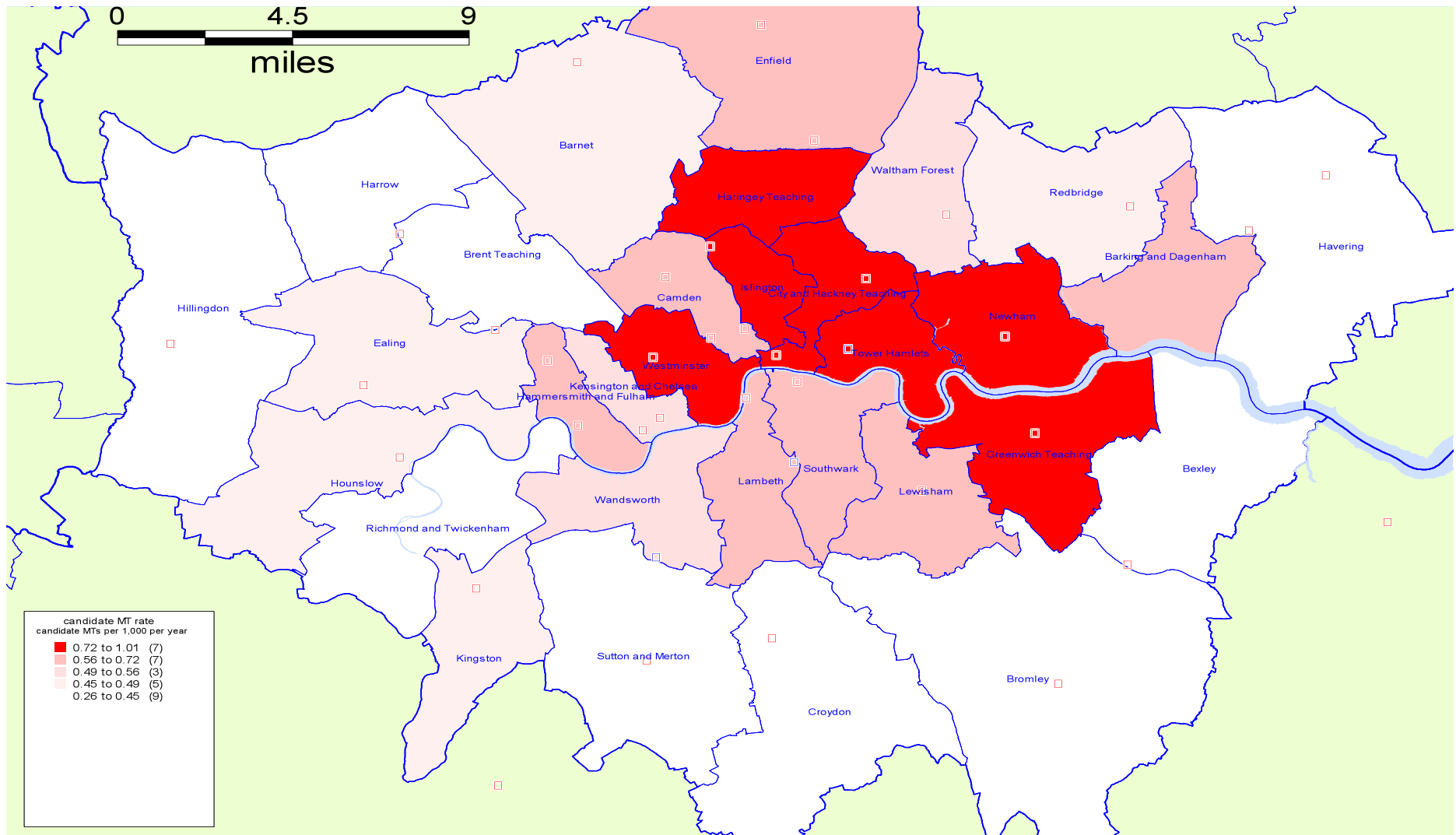
Inequalities in Health



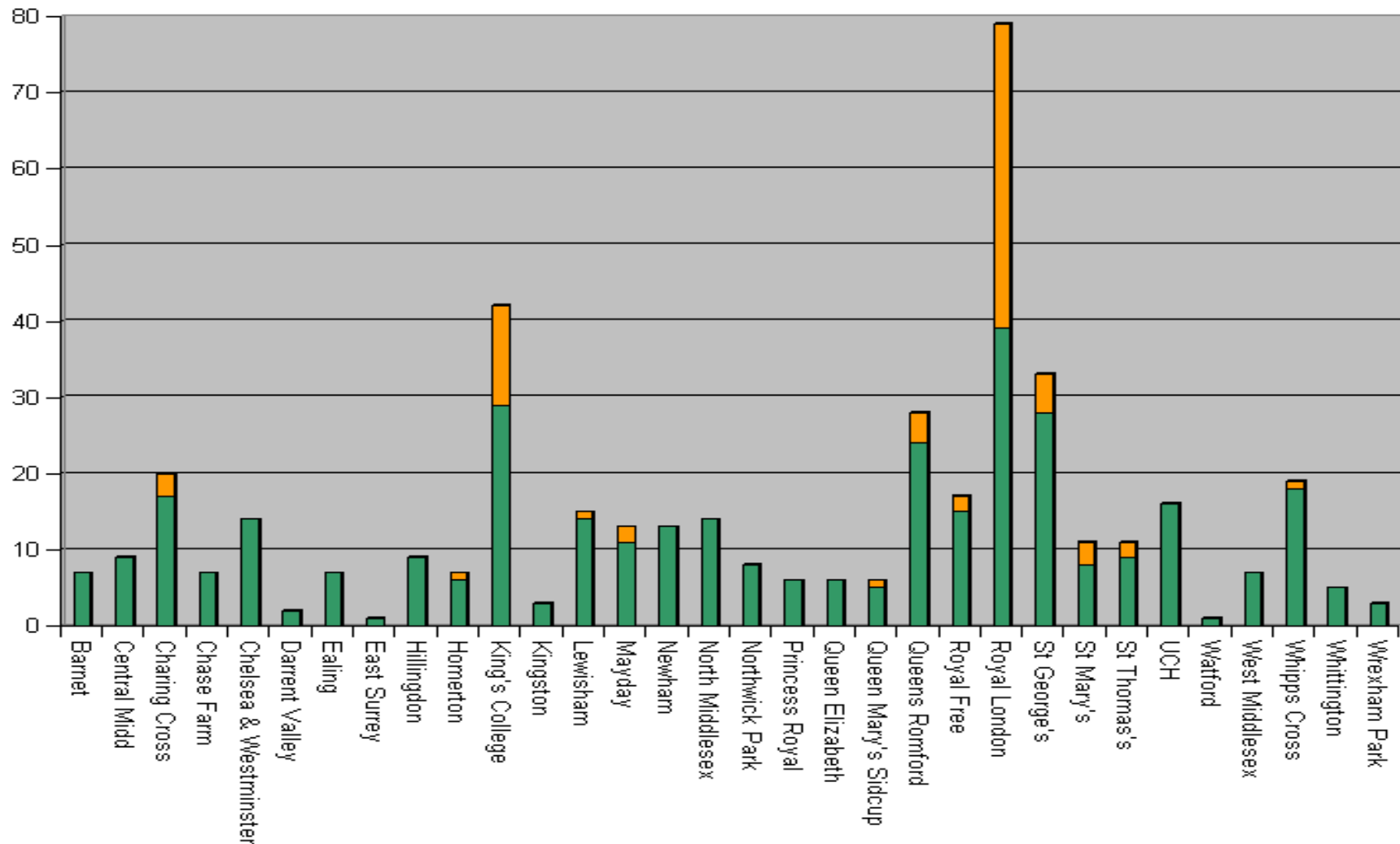
Inequalities In Health



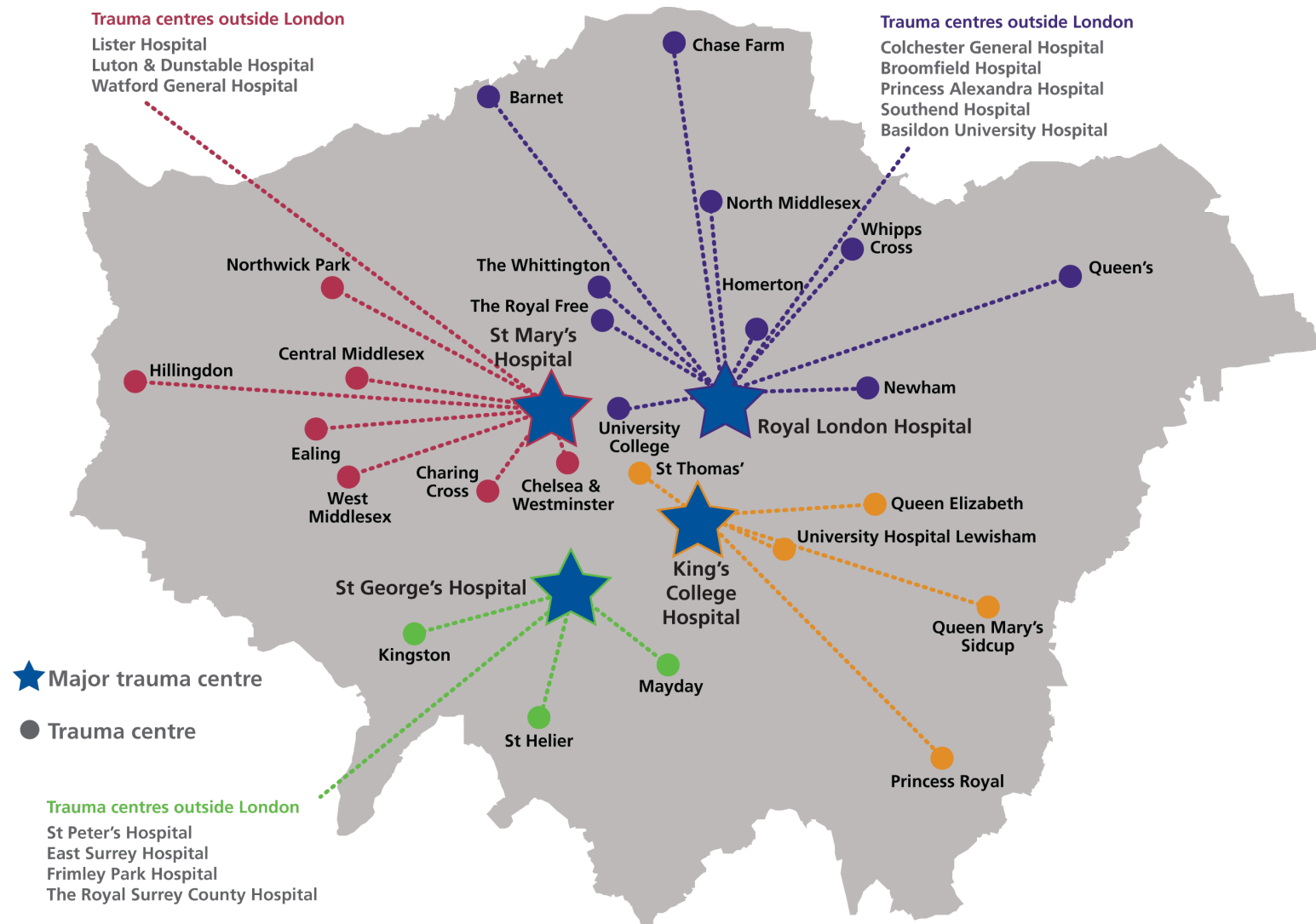
Incidence of Major Trauma



Current Trauma workload by London HEMS & LAS into London Emergency Departments Between 9th – 29th March 2009



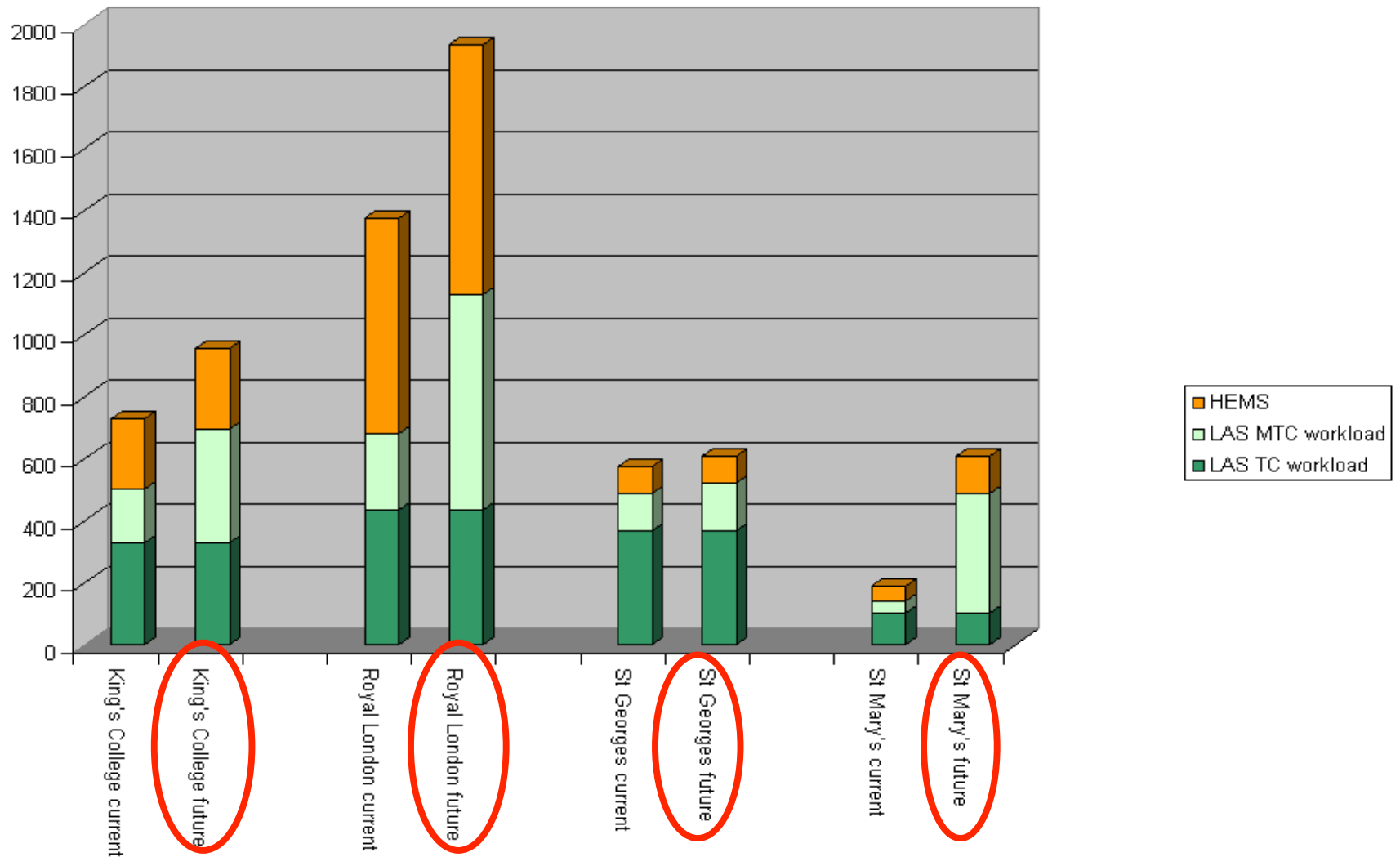
Trauma: four networks (2010)



Major trauma decision tree

Step	Assessment	Status	Action	All
Step one	Assess vital signs and level of consciousness [Three-tick test]	<ul style="list-style-type: none"> ? Glasgow coma scale <14 ? Sustained systolic blood pressure <90 ? Respiratory rate <10 >29 	<p>Yes to any one</p> <p>Convey to nearest major trauma centre. ▶ Ensure you contact the clinical co-ordination desk in EOC.</p>	<p>Should the airway become compromised at any time consider conveying/diverting patient to nearest trauma centre.</p>
Step two	Assess anatomy of injury [Eight-tick test]	<ul style="list-style-type: none"> ? Chest injury with altered physiology ? Traumatic amputation proximal to wrist/ankle ? Penetrating trauma to neck, chest, abdomen, back or groin ? Suspected open and/or depressed skull fracture ? Suspected pelvic fracture ? Spinal trauma suggested by abnormal neurology ? Trauma with facial and/or circumferential burns ? Time-critical (>20% burns) 	<p>Yes to any one</p> <p>Convey to nearest major trauma centre. ▶ Ensure you contact the clinical co-ordination desk in EOC.</p>	<p>Patients with Isolated head trauma may be conveyed to a trauma centre with appropriate neurosurgical facilities.</p>
Step three	Assess mechanism of injury [Four-tick test]	<ul style="list-style-type: none"> ? Traumatic death in same passenger compartment ? Falls >20ft (two stories) ? Person trapped under vehicle including 'one unders' ? Bullseye windscreen and/or damage to 'A' post of vehicle 	<p>Yes to any one</p> <p>Patients may benefit from going to a major trauma centre. ▶ Contact the clinical co-ordination desk in EOC for further advice.</p>	
Step four	Assess special patient or system-consideration [Four-tick test]	<p>Patients who have sustained trauma but do not fit any of the criteria above but are:</p> <ul style="list-style-type: none"> ? Older patients (>55 years) ? Pregnant (>20 weeks) ? Known to have bleeding disorder ? Morbidly obese 	<p>Yes to any one</p> <p>Patients may benefit from going to a major trauma centre. ▶ Contact the clinical co-ordination desk in EOC for further advice.</p>	
		No	Take to nearest trauma centre	

Current and predicted annual trauma workload by all London HEMS & LAS into Major Trauma Centres according to current flow



Demand management of the critically ill and injured

The Issues

- How do we manage increasing emergency demand?
- Can we manage capacity issues in EDs?
- What's the role of information?



Stakeholder feedback

“Multiple blue light calls close together impact on patient safety and care” *London EM Consultants*

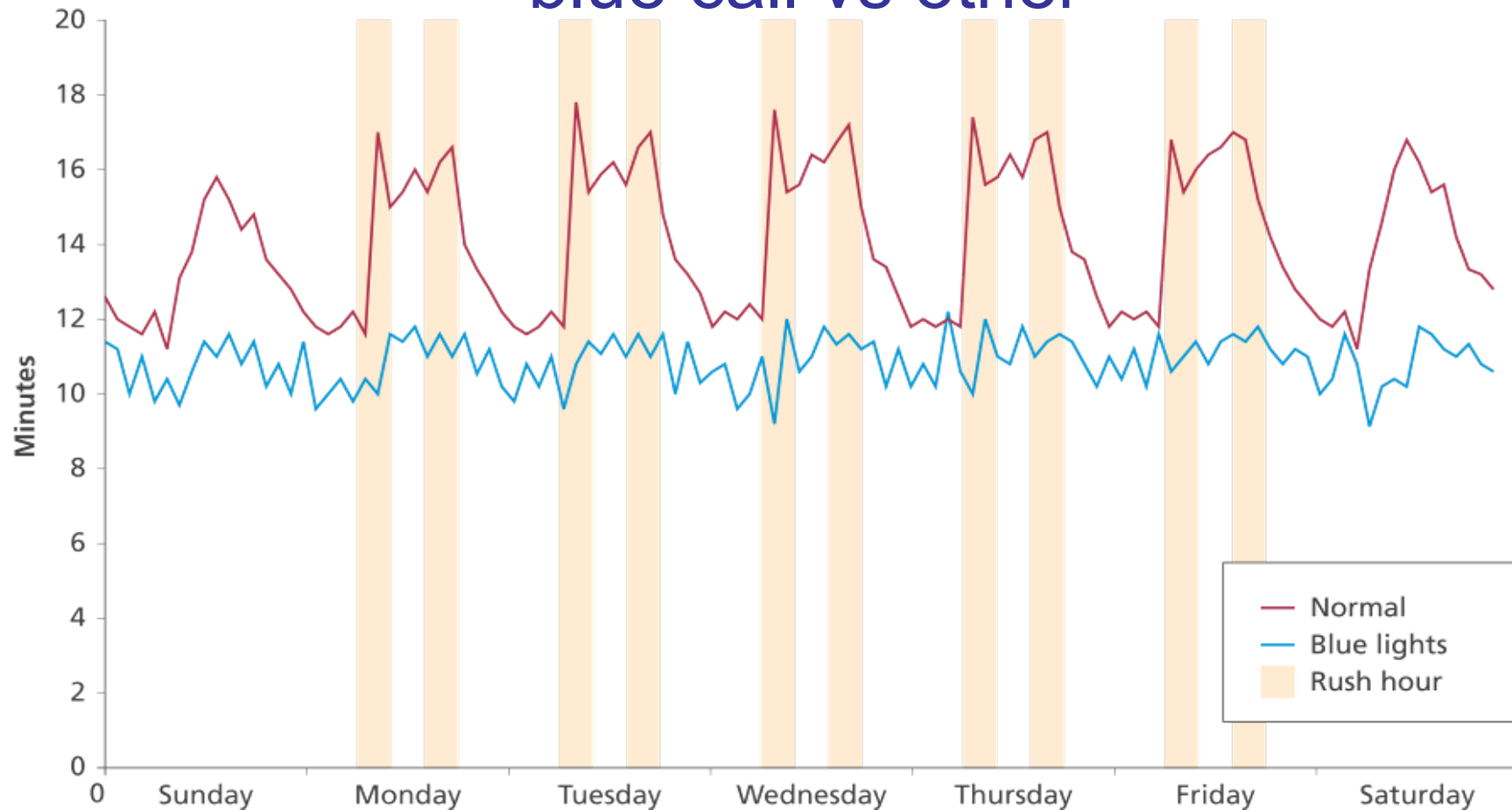
“We can manage multiple trolley patients in close succession but multiple blue calls close together affects patient care & delays turn around of crews as we don't have the staff or space / trolleys to receive them all” *London EM Matrons*





Average journey times in ambulances 2005-08

blue call vs other



- Shorter journeys than to MTCs
- Rush hour variation for blue light less marked than for normal journeys

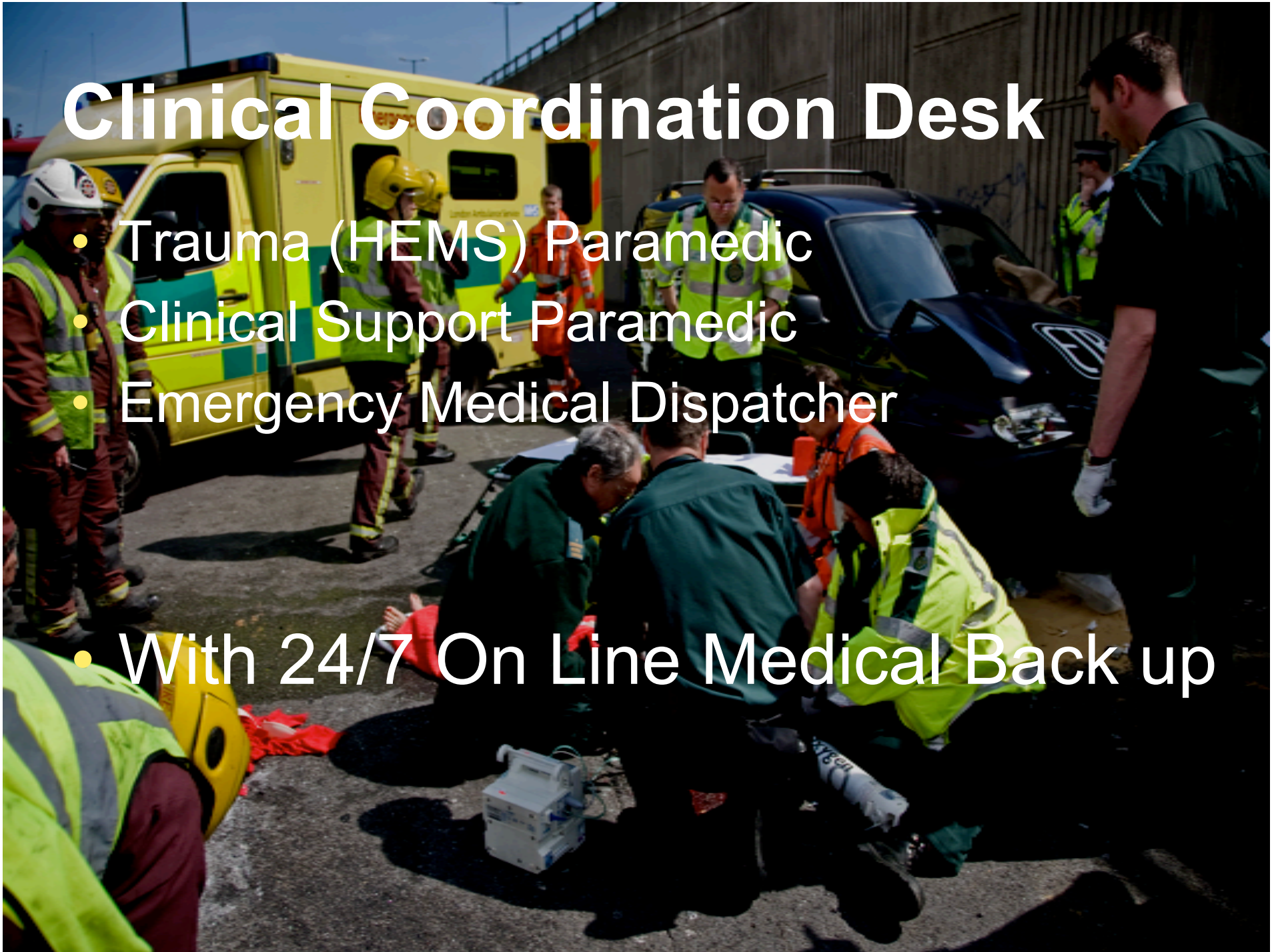
Clinical Coordination Desk: a solution?

Build on existing Paramedic Support Desk to develop a real time Clinical Coordination function to monitor the incidence and flows of patients requiring specialist services



Clinical Coordination Desk

- Trauma (HEMS) Paramedic
 - Clinical Support Paramedic
 - Emergency Medical Dispatcher
-
- With 24/7 On Line Medical Back up



Clinical Coordination Desk



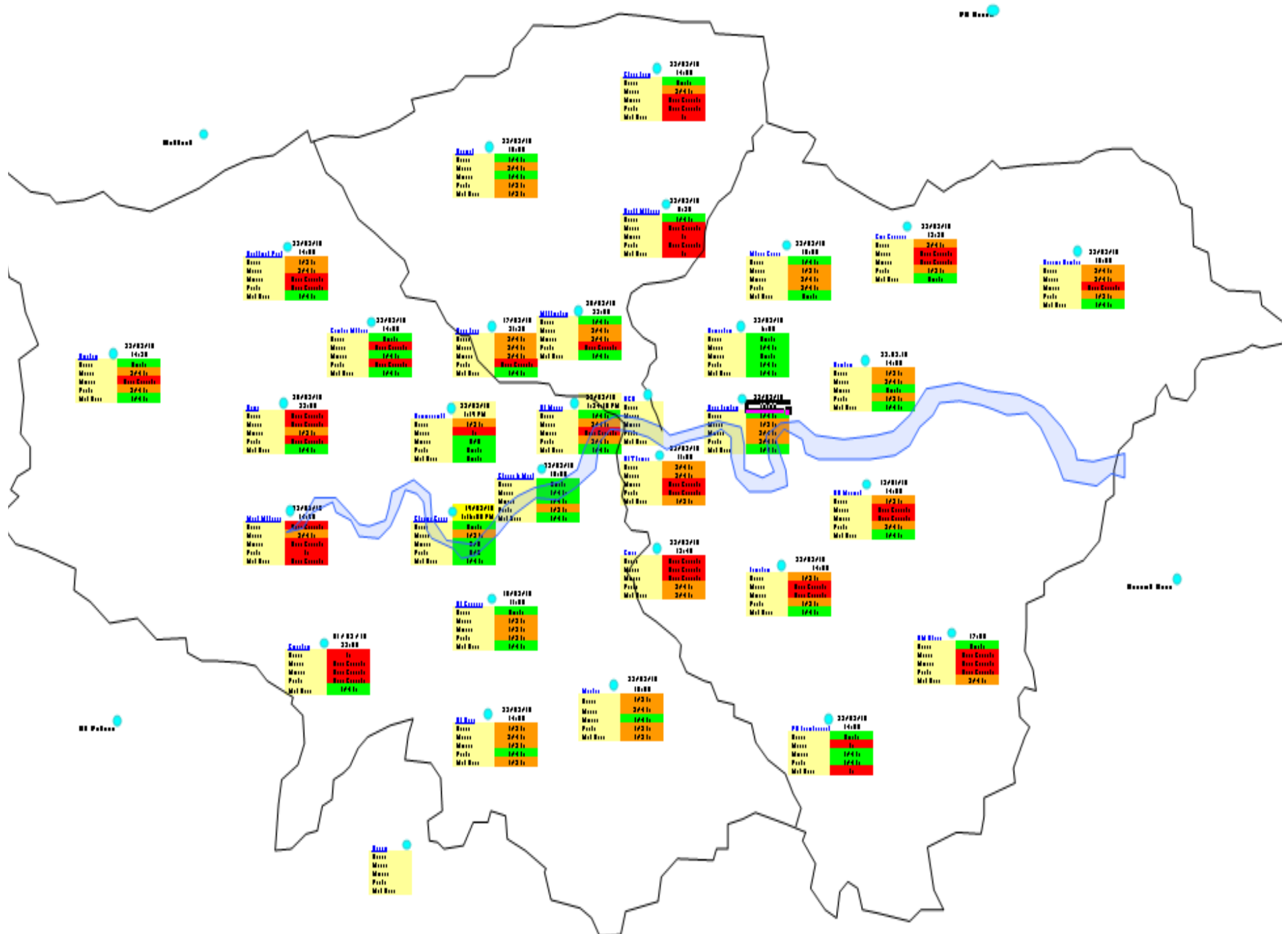
Not Just Trauma

- Stroke
- Maternity
- Paediatrics
- Cardiac



Continuing to provide clinical advice to ambulance crews and supporting transfers





UPDATE

Age Group	Don't know	No	Yes	Probably yes	Probably no
18-24	10%	10%	10%	10%	10%
25-34	10%	10%	10%	10%	10%
35-44	10%	10%	10%	10%	10%
45-54	10%	10%	10%	10%	10%
55-64	10%	10%	10%	10%	10%
65-74	10%	10%	10%	10%	10%
75+	10%	10%	10%	10%	10%

Clinical Coordination functions:

- Monitor number of patients conveyed directly to specialist centres
- Support crews in making triage and bypass decisions
- Coordination of out of county ambulances and arrivals of air ambulance services
- Point of contact for Emergency Departments re: Resus capacity
- Provide real-time information about critical care and ED capacity





Thank you

