West Midlands epilepsy network

Dougall McCorry

Plan

- Update on the network meetings – where are improvements being made
- The cost of failure to improve
- The challenges and barriers to improving epilepsy care

09:30	Coffee and Registration	
10:00	Introduction / What does the data show?	Dr Dougall Mccorry
10:30	The role of community based epilepsy services'	Phil Tittensor, Lead Epilepsy Nurse The Royal Wolverhampton NHS Trust
11:00	Coffee	
11.30	NEAD care pathway	Denise Hughes (ESN) and Kerry Evans (neuropsychiatry liaison nurse)
12:00	Using technology to aid patient self-management	Amanda Stoneman, Epilepsy Action
12.30	Lunch	
13:30	Developing a Service for first seizure and epilepsy in a DGH	Deborah Clarke and Julie Day Specialist Epilepsy Nurse & Neurologist? (Worcester)
14:00	Epilepsy self-management	Denise Hughes (ESN) and Rebecca Devlin (OT)
14:30	Use of early alert systems for patients with Neurological conditions' 'The role of trial design in improving care'	Dr David Nicholl, Sandwell and West Birmingham Hospitals NHS Trust
15.15	Feedback, Summary and next steps	Dr Dougall Mccorry
15:30	Finish/Coffee	

Meeting June 14

- Examples of high quality care- Phil Tittensor community based nursing service
- Paediatrics epilepsy network. QE/ Barberry service
- Weaknesses

We discussed some potential weaknesses in individual services – the following points were raised

- Clinic times – Monday to Friday only, no clinic or telephone advice available outside those times.
- Referral to Epilepsy surgery delayed.
- Prolonged waiting lists - telemetry, neuropsychiatry, neuropsychology
- Access to newer AEDs
- Transition from CAMMS (16) to adult services (19yrs)
- Birmingham City wide pathway for LD and epilepsy.
- MRI for LD patients no formal pathway– should be epileptologist led or have a named lead.
- Numbers of epilepsy nurses – eg none in Worcester, Heart of England NHS trust, Dudley, New Cross Hospital.
- Neurophysiology – workforce
- Succession planning for a variety of staff groups
- Specialist higher education (for nurses) limited since MSc suspended
- Specialist LD service for adults with LD has been decommissioned in Coventry. Some suggested that non elective admissions have risen for this group of patients
- Need to move from epilepsy nurses to epilepsy nursing SERVICE
- Capacity within secondary care - one nurse in Coventry
- Neuropsychiatry waits for patients with none epileptic attack disorder (NEAD)
- Neuropsychology for surgical candidates limited , virtually no service for non-surgical patients

Epilepsy admissions to secondary care…

- Clinicians not interested in epilepsy did not attend
- No A/E/ paramedic/ GP or CCG representative at first network meeting.

THE DATA-NASH 2- Prof Tony Marson

- National Audit of Seizure Management in Hospitals 2 (NASH2) findings include:
- 36.5% had the management of future seizures discussed with the patient or carers
- 61.5% of patients who had epilepsy were not documented as having seen a medical specialist within the previous 12 months
- 48% had attended the same A&E as a result of a seizure in the previous 12 months
- 41% of patients attending A&E were on single antiepileptic drug (AED) and a further 22% were on no AED

NASH 2 West Midlands
'known epilepsy'

- 276 patients included across 14 hospitals
- **Half** attended A/E because of sz in past 1 year
- 80% cases : seizures had stopped by time of arrival to A/E
- 1 in 3 discharged from A/E
- Investigations during admission:
  - 20% received a CT head
  - 2% MRI 2% EEG

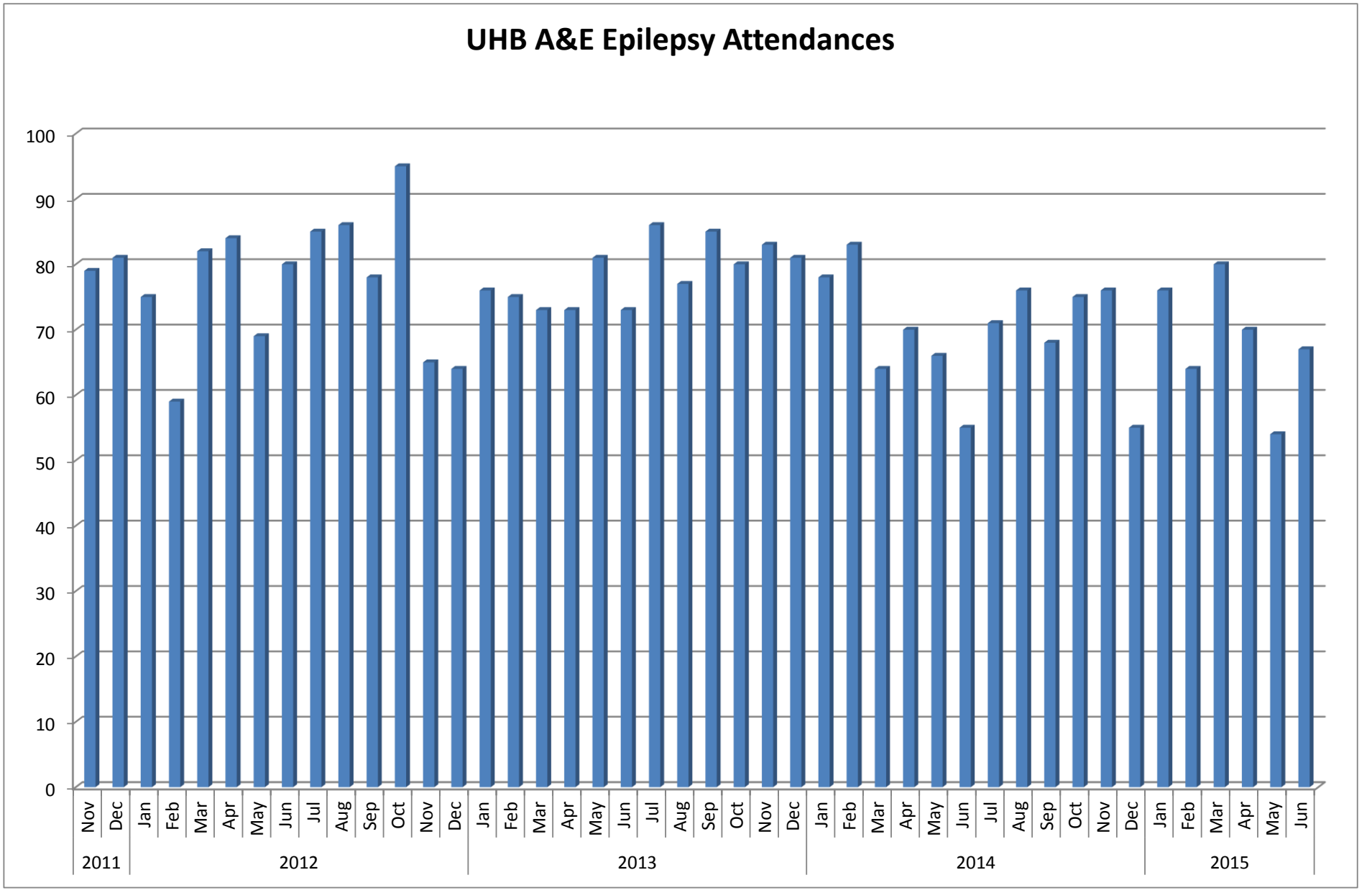
West Midlands NASH 2 data

Hospital	num pts	care plan yes	prev ED attendance yes	ESN yes	num discharged num pts	known ep	prov alc
Birmingham Heartlands Hospital	16	6.3	62.5	0.0	9	81.3	6.3
George Eliot Hospital	11	100.0	36.4	9.1	1	54.5	0.0
Good Hope Hospital	23	4.3	56.5	0.0	13	82.6	0.0
Manor Hospital	23	21.7	52.2	21.7	16	95.7	0.0
Russells Hall Hospital	21	4.8	57.1	4.8	12	42.9	0.0
Sandwell and West Birmingham Hospitals NHS Trust	29	17.2	62.1	6.9	0	79.3	10.3
Shrewsbury and Telford Hospital NHS Trust	21	4.8	47.6	23.8	12	85.7	4.8
Solihull Hospital	20	90.0	30.0	0.0	2	85.0	5.0
Stafford Hospital	16	93.8	56.3	25.0	10	68.8	6.3
The County Hospital- Wye Valley NHS Trust	18	5.6	33.3	0.0	8	66.7	33.3
University Hospital Coventry	26	92.3	23.1	23.1	1	73.1	0.0
University Hospital of North Staffordshire	19	10.5	52.6	0.0	2	68.4	10.5
Warwick Hospital	20	20.0	45.0	10.0	0	90.0	5.0
Worcestershire Royal Hospital	13	38.5	53.8	7.7	11	84.6	7.7
Total	276				97		
Average			47.8			75.6	

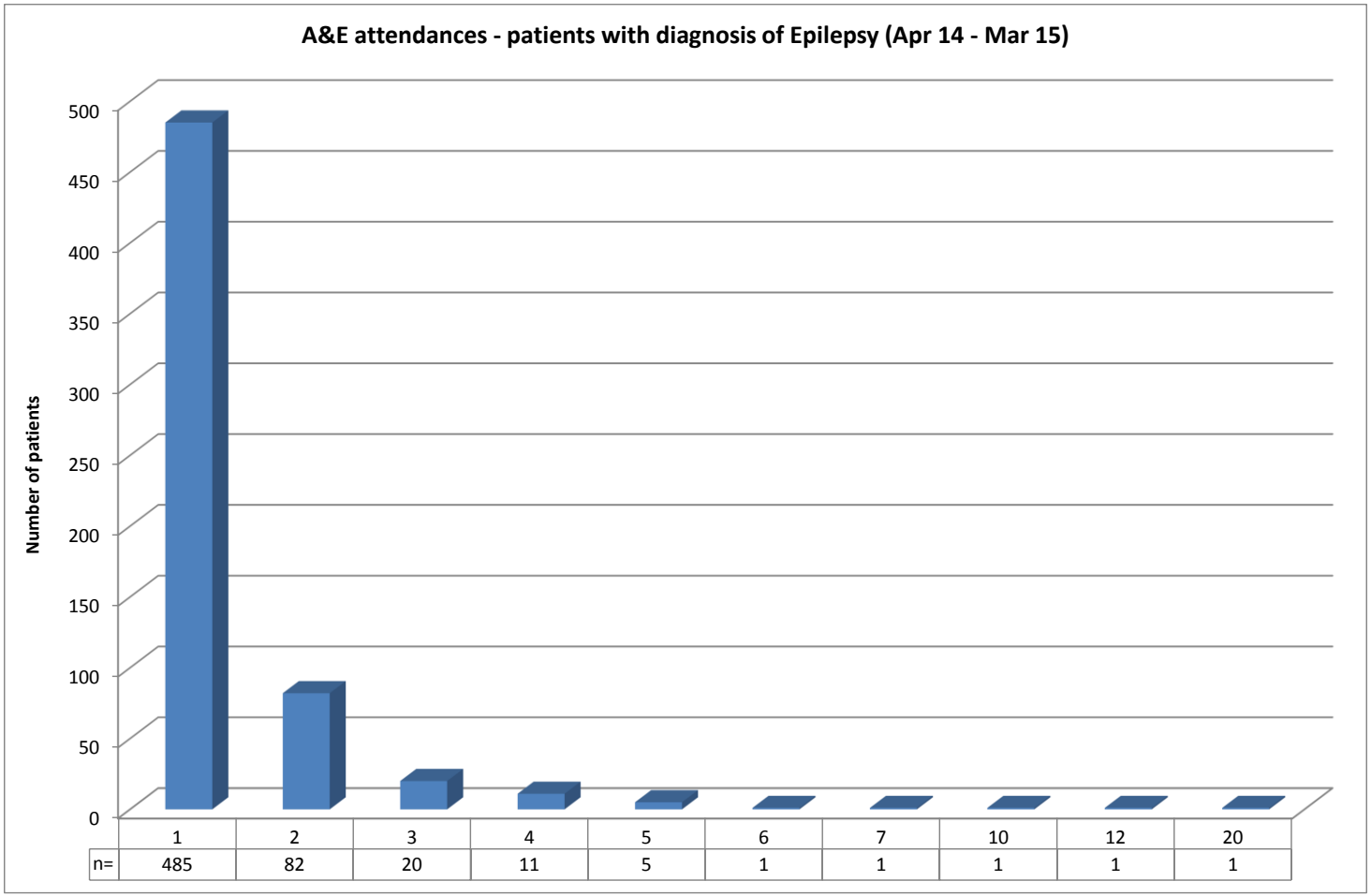
Hospital	num pts	transfer % CDU	ICU	neuro wd	EMU	med ward
Birmingham Heartlands Hospital	16	6.3	6.3	0.0	31.3	0.0
George Eliot Hospital	11	27.3	0.0	0.0	18.2	45.5
Good Hope Hospital	23	0.0	0.0	0.0	4.3	34.8
Manor Hospital	23	0.0	0.0	0.0	30.4	0.0
Russells Hall Hospital	21	4.8	0.0	0.0	38.1	0.0
Sandwell and West Birmingham Hospitals NHS Trust	29	0.0	0.0	0.0	96.6	3.4
Shrewsbury and Telford Hospital NHS Trust	21	0.0	0.0	0.0	42.9	0.0
Solihull Hospital	20	0.0	0.0	0.0	60.0	30.0
Stafford Hospital	16	0.0	0.0	0.0	25.0	0.0
The County Hospital- Wye Valley NHS Trust	18	0.0	0.0	0.0	0.0	50.0
University Hospital Coventry	26	50.0	7.7	3.8	0.0	30.8
University Hospital of North Staffordshire	19	21.1	5.3	26.3	10.5	0.0
Warwick Hospital	20	0.0	0.0	0.0	35.0	55.0
Worcestershire Royal Hospital	13	0.0	0.0	0.0	15.4	0.0
Average					29.1	17.8

NASH 2 Regional observations

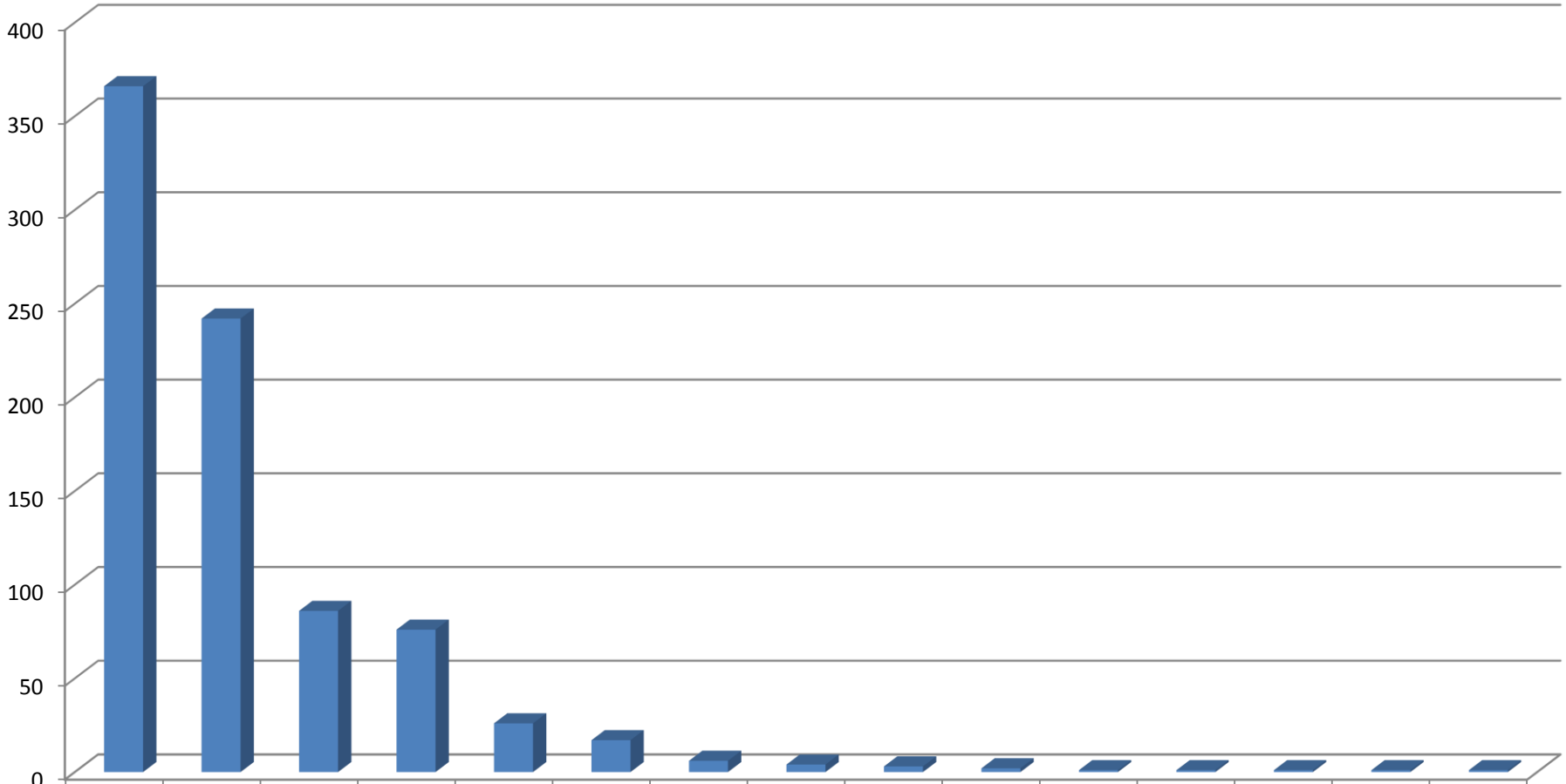
- Are patients being admitted to A/E unnecessarily?
- Could admission be avoided by developing a care plan with ‘fast track’ alternatives?


UHB A&E Epilepsy Attendances
100
90
80
70
60
50
40
30
20
10
0
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
2011
2012
2013
2014
2015

UHB DATA A/E attendances –epilepsy- 833 attendances Male 462/ FM371

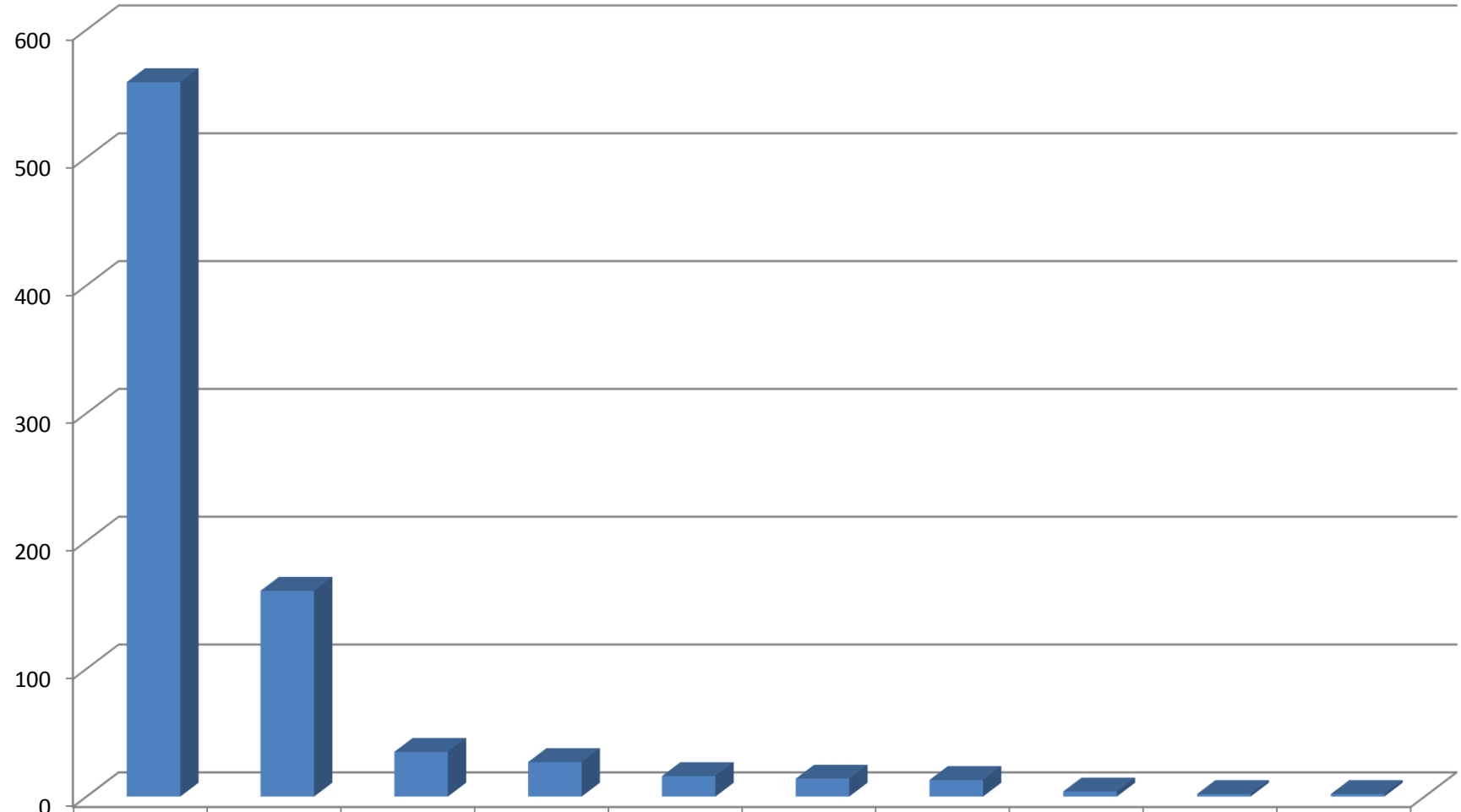


Discharge Destination



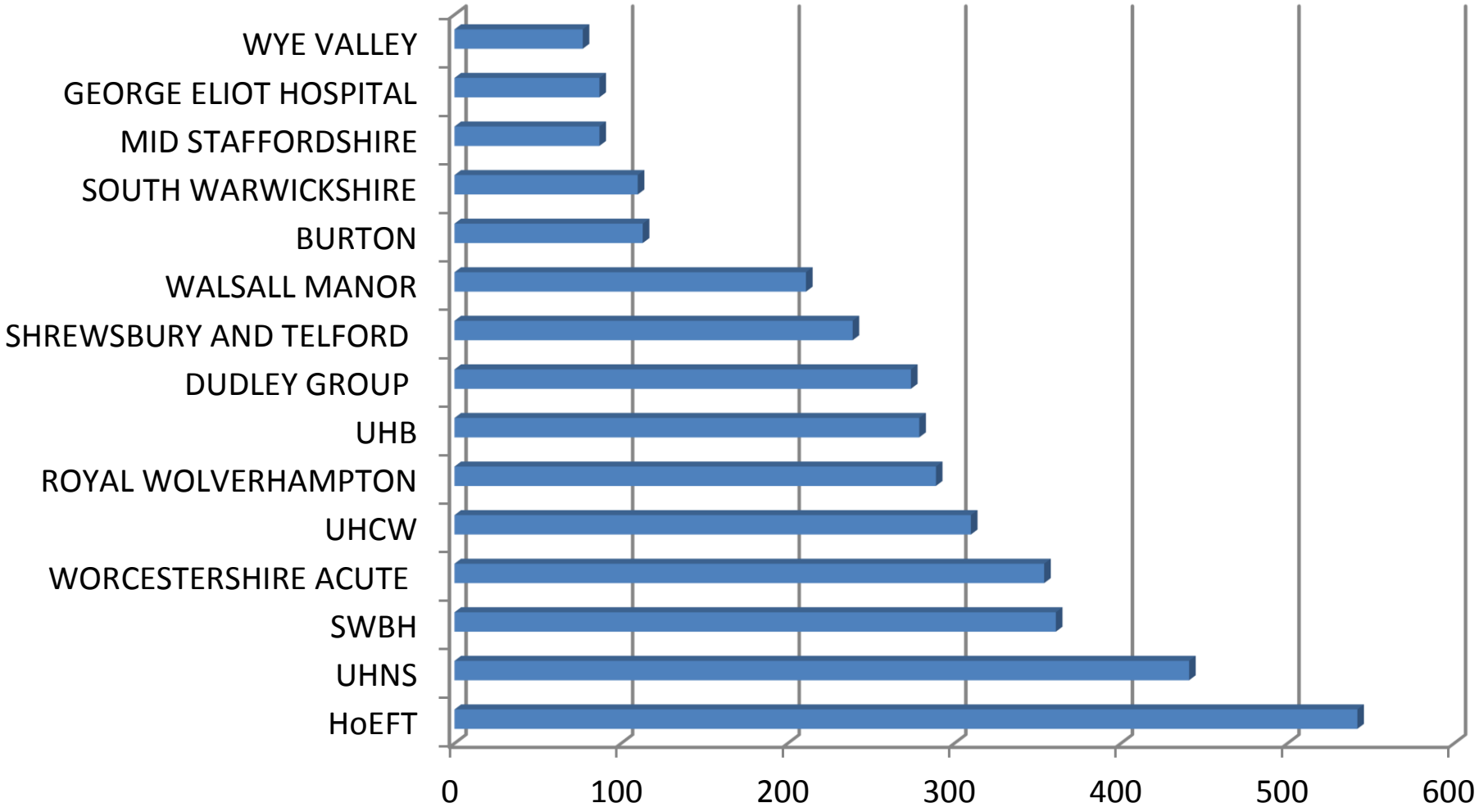
	Admitted to UHB	Home - GP Follow Up	Clinic - First Seizure Clinic	Home - No Follow Up	Clinic - Other	Home - Return ED SOS	Left Against Medical Advice	Left Without Being Seen	Other	Transfer - BCH	Clinic - Fracture Clinic	Clinic - Max Fax Clinic	Clinic - Neurosurgery Hot Clinic	Home - CPN Follow Up	Home - Hands Rolling List
Total	366	242	86	76	26	17	6	4	3	2	1	1	1	1	1

Incident location



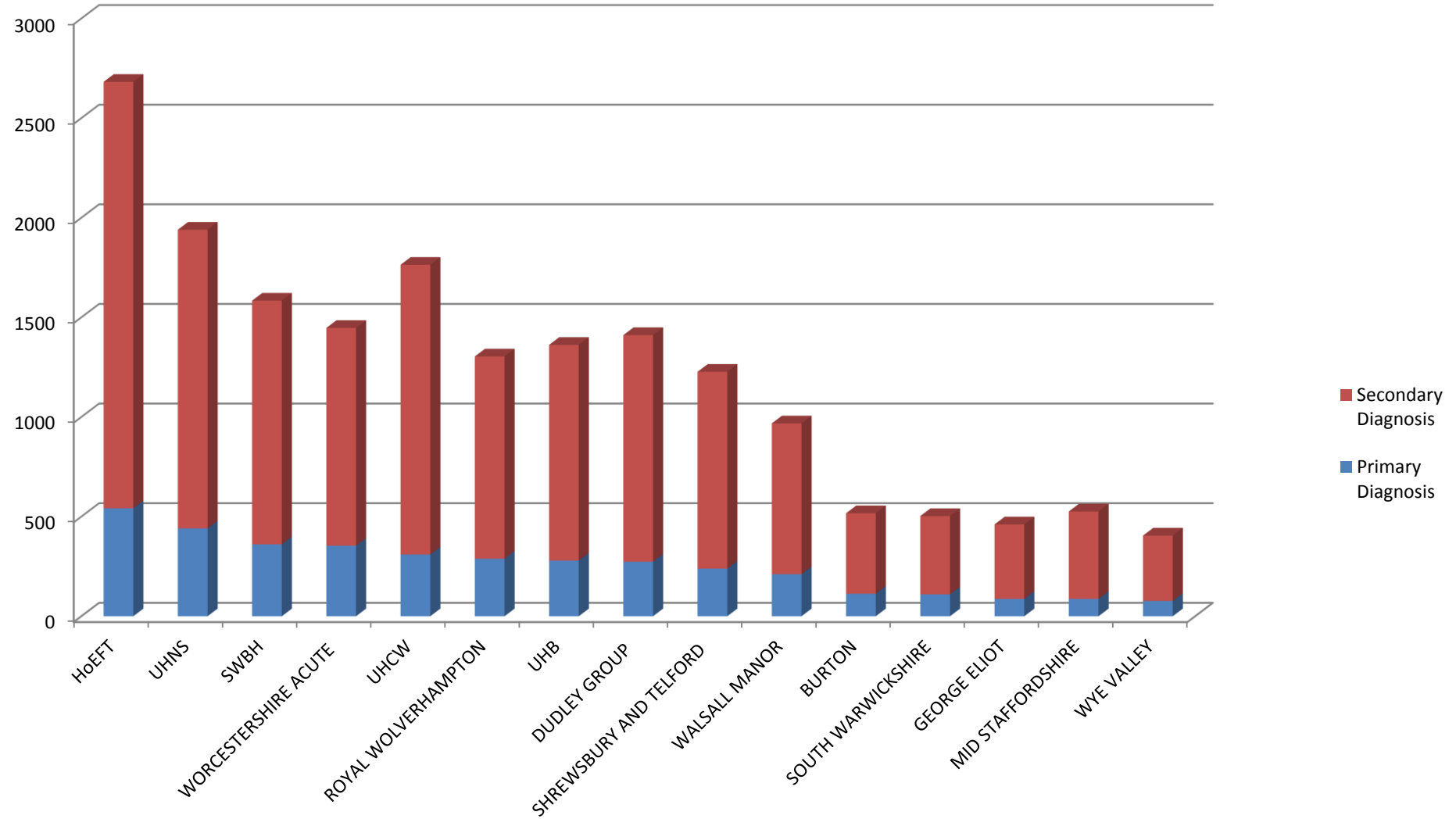
	Home / Private Dwelling	Public Place	Other	Care/Nursing Home	UHB - Visitor	Other NHS Trust	Work	UHB - Staff	School	University
Grand Total	559	161	35	27	16	14	13	4	2	2

Non-Elective Epilepsy Admissions by Provider Trust (April 13 - Jan 15)



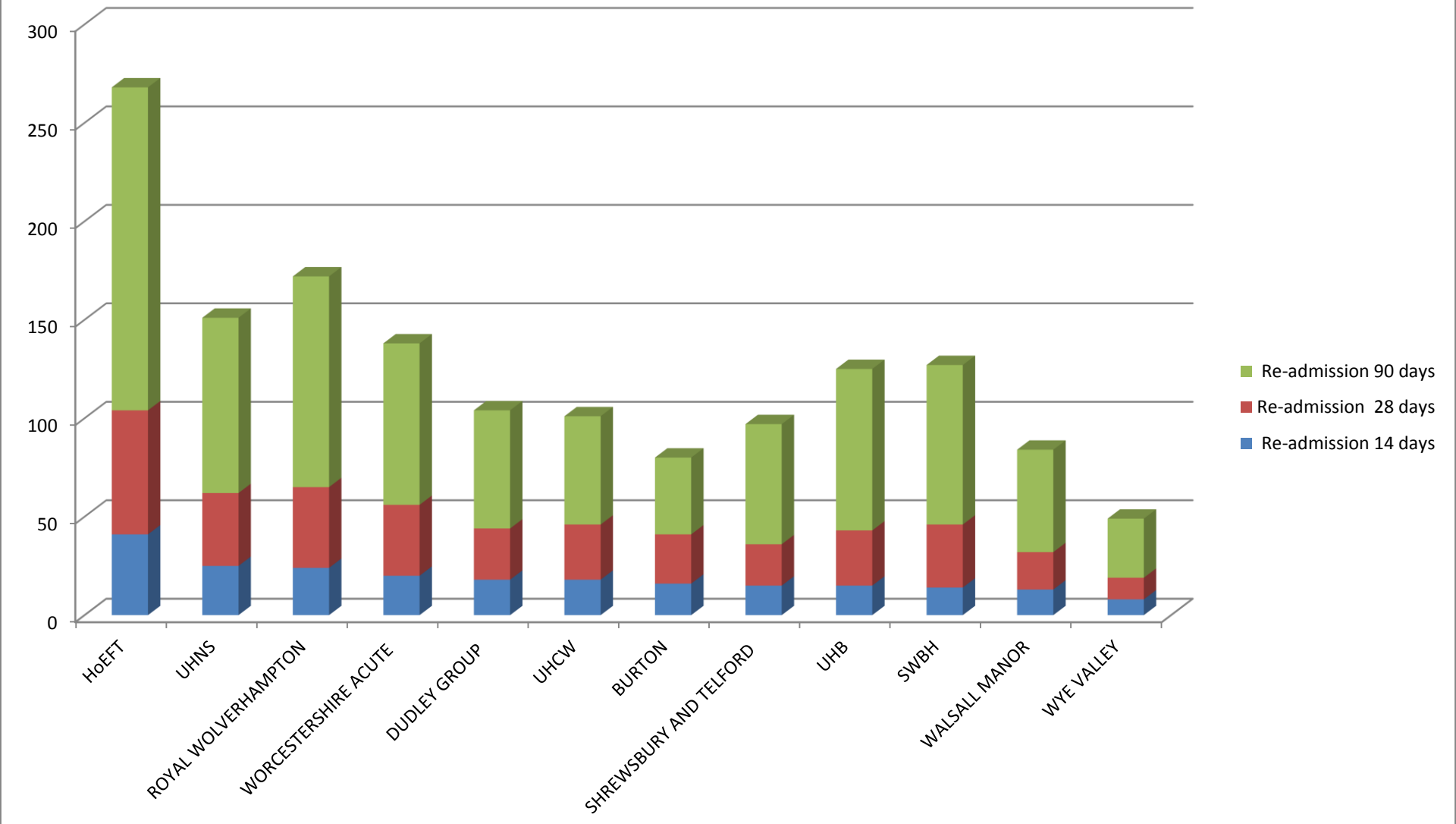
Admissions by Provider Trust

(Apr 13 - Jan 15)



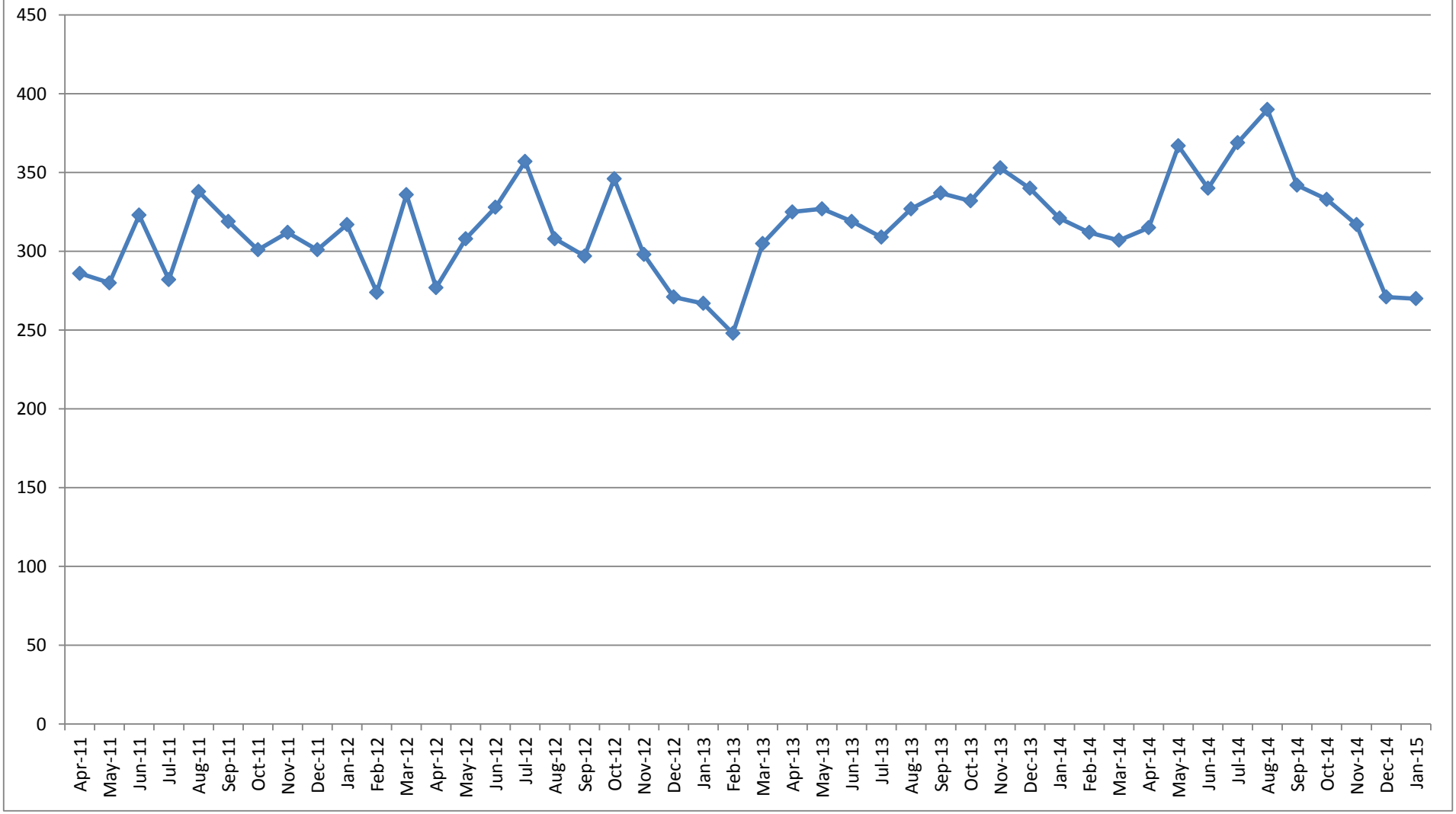
Readmissions

(Primary Diagnosis of Epilepsy, Apr 13 - Jan 15)



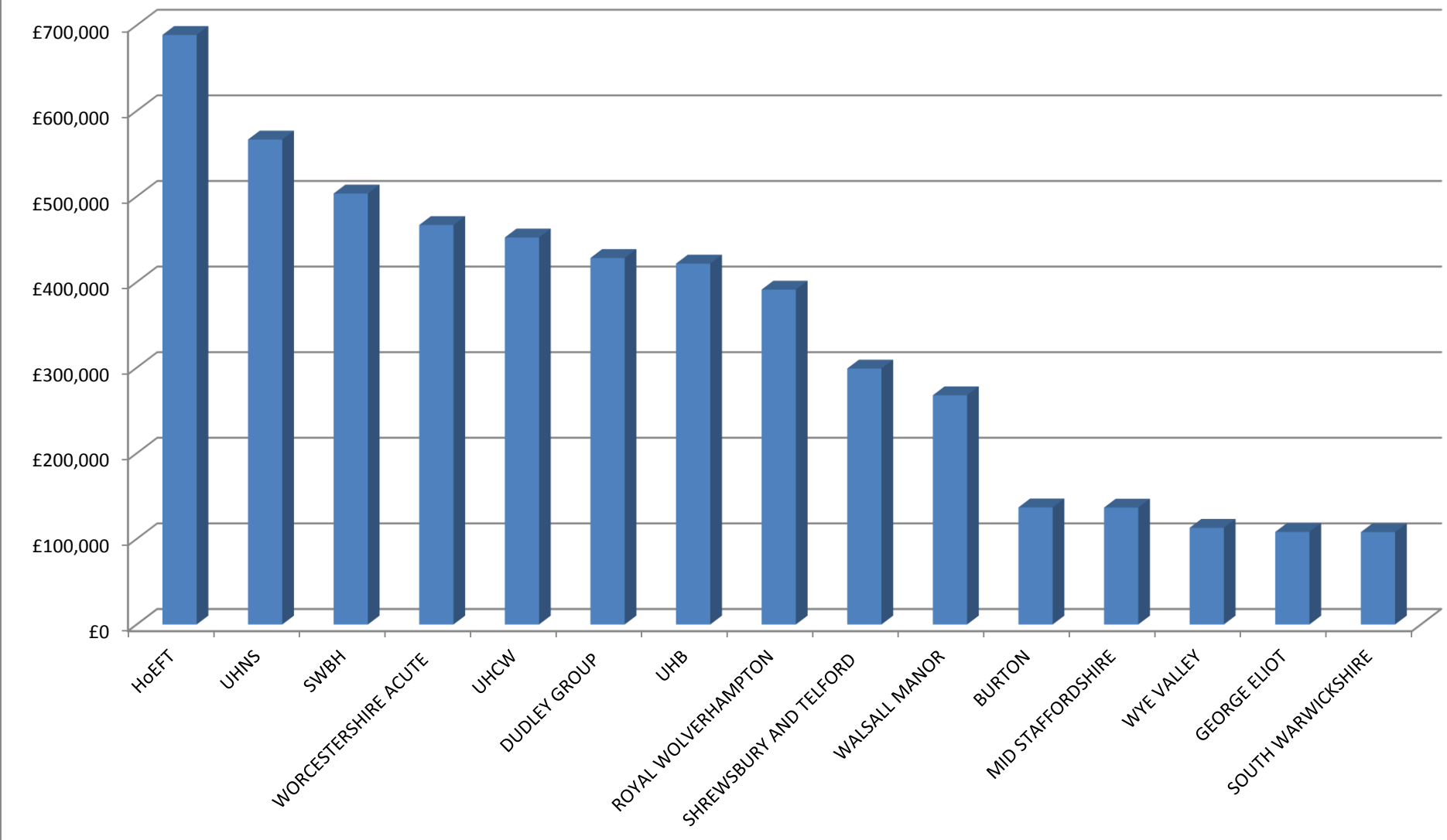
Admissions with Primary Diagnosis of Epilepsy by Month (Apr 11 - Jan 15)

Arden, Herefordshire and Worcestershire, Birmingham and the Black Country, Shropshire and Staffordshire



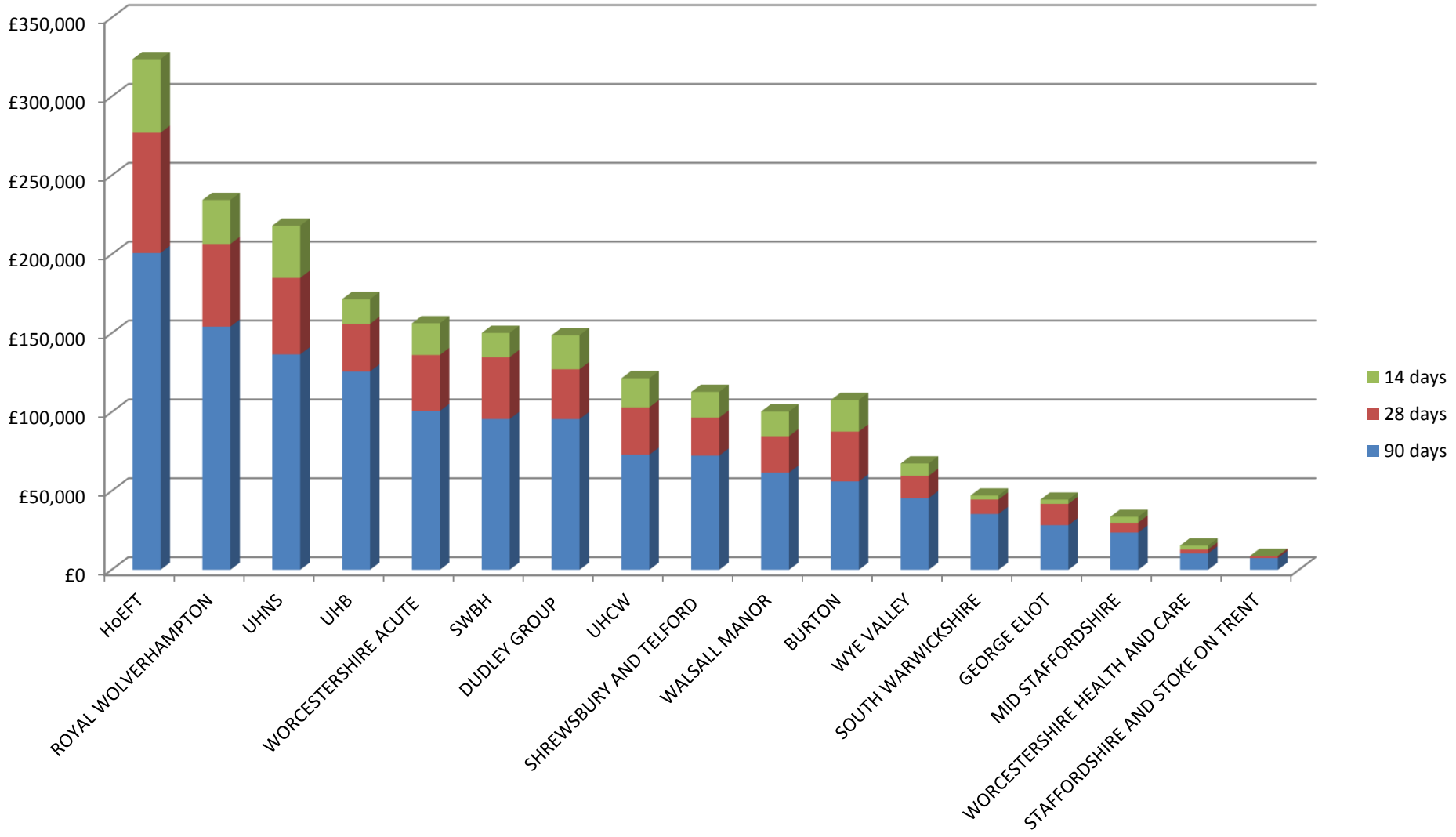
Tariff Cost by Provider Trust

(Non-elective admissions, Primary Diagnosis of Epilepsy, Apr 13 - Jan 15)



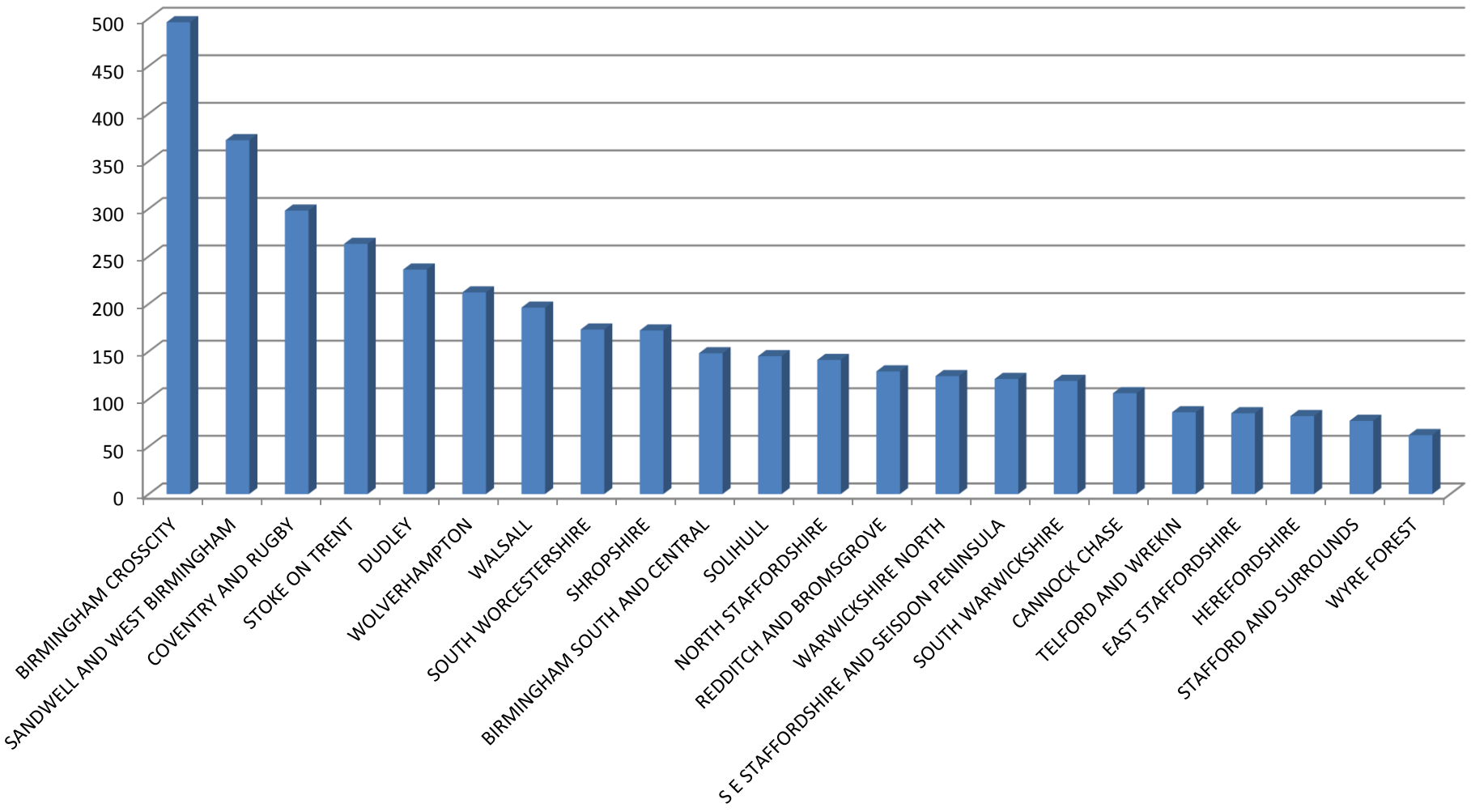
Readmissions - Tariff Cost by Provider Trust

(Primary Diagnosis of Epilepsy, Apr 13 - Jan 15)



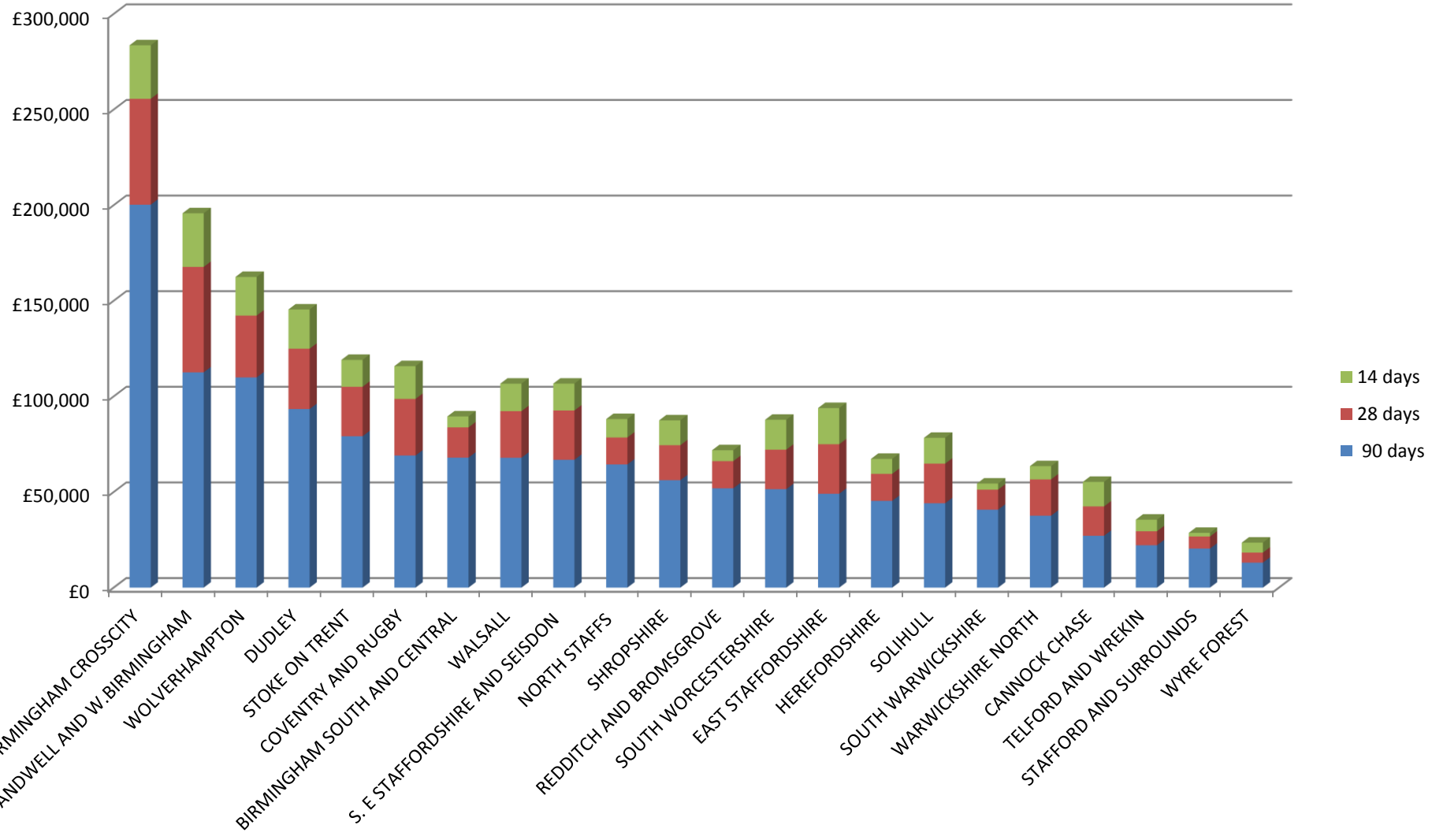
Admissions by CCG

(Primary Diagnosis of Epilepsy, Apr 13 - Jan 15)



Readmissions - Tariff Cost by CCG

(Primary Diagnosis of Epilepsy, Apr 13 - Jan 15)



West Midlands admissions – average cost of admission- ? £1800

Provider Trust Name	Provider Trust Code	Primary Diag:G40 Epilepsy, Pri Diag:G41 Status epilepticus	Secondary Diag:G40 Epilepsy, Sec Diag:G41 Status epilepticus,
HEART OF ENGLAND NHS FOUNDATION TRUST	RR1	542	2,140
UNIVERSITY HOSPITAL OF NORTH STAFFORDSHIRE NHS TRUST	RJE	441	1,499
SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST	RXK	361	1,223
WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST	RWP	354	1,093
UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	RKB	310	1,454
THE ROYAL WOLVERHAMPTON NHS TRUST	RL4	289	1,015
UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST	RRK	279	1,083
THE DUDLEY GROUP NHS FOUNDATION TRUST	RNA	274	1,137
SHREWSBURY AND TELFORD HOSPITAL NHS TRUST	RXW	239	988

Primary Diagnosis:G40 Epilepsy, Primary Diagnosis:G41 Status epilepticus				
Non-Elective & Elective admissions				
Tariff Cost by CCG				
CCG Name	**CCG Code**	**Re-admission only 90 days**	**Re-admission only 28 days**	**Re-admission only 14 days**
BIRMINGHAM CROSSCITY	13P	£200,239	£55,381	£27,993
SANDWELL AND WEST BIRMINGHAM	05L	£112,584	£55,122	£28,057
WOLVERHAMPTON	06A	£109,915	£32,351	£20,206
DUDLEY	05C	£93,388	£31,553	£20,513
STOKE ON TRENT	05W	£79,172	£25,862	£14,061
COVENTRY AND RUGBY	05A	£69,088	£29,605	£17,126
BIRMINGHAM SOUTH AND CENTRAL	04X	£67,993	£15,795	£5,735
WALSALL	05Y	£67,923	£24,348	£14,395
SOUTH EAST STAFFORDSHIRE AND SEISDON PENINSULA	05Q	£66,855	£25,770	£14,055
NORTH STAFFORDSHIRE	05G	£64,414	£14,103	£9,643
SHROPSHIRE	05N	£56,184	£18,279	£13,031
REDDITCH AND BROMSGROVE	05J	£51,942	£14,210	£5,704
SOUTH WORCESTERSHIRE	05T	£51,475	£20,653	£15,656
EAST STAFFORDSHIRE	05D	£49,099	£25,877	£18,937
HEREFORDSHIRE	05F	£45,370	£14,108	£7,856
SOLIHULL	05P	£44,135	£20,695	£13,509
SOUTH WARWICKSHIRE	05R	£40,766	£10,482	£3,174
WARWICKSHIRE NORTH	05H	£37,620	£18,971	£6,924
CANNOCK CHASE	04Y	£27,122	£15,335	£12,845
TELFORD AND WREKIN	05X	£22,155	£7,315	£6,080
STAFFORD AND SURROUNDS	05V	£20,421	£6,302	£1,922
WYRE FOREST	06D	£13,081	£5,229	£5,229

Cost savings

- Prevention of 15-20 admissions to hospital would save the salary of a single epilepsy nurse.
- For one patient at UHB healthcare costs alone are greater than the salary of a single epilepsy nurse.

Improvements in acute seizure care

- Identified as a weakness in current care
- Improving care depends on local resources and may have local resources. Consider UHB v HoE
- Patients with known epilepsy - reduce re-admissions rate through use of standardised care plan (Including rescue medication & red flags for 999) -
- - Ambulance service data profiling non-conveyance -… reviewed protocols … WMAS alerted to frequent callers.
- Initiate an 'Alert System' notifying the epilepsy team when a patient attends A&E or is admitted to hospital
- Introduce a Direct referral from A&E to the Epilepsy Service a responsive service

Lessons from Ireland -Iyer 2012*

- Retrospective (2004) data compared with prospective data (2008-2009)
- Use of care pathway resulted in
  - Reduction in admissions 3% to 2.2% (despite increase in total admissions of 10,000)
  - Reduction in LOS from 4-5 days to 2 days
  - Reduction in readmissions 45% to 8.9%
- 31% patients were discharged from A/E in 2008-9
- Those who have had a single self limiting convulsion, alert 90 minutes after are triaged to a rapid access clinic

Iyer et al. (2012) A seizure care pathway in the emergency department. Preliminary quality and safety improvements. *Epilepsy Research and Treatment* Volume 2012, Article ID 273175,

The challenges to progress

- Very few epilepsy interested individuals…
- The CCGs and trusts are strapped for money - can we expect trusts to invest money in epilepsy care? How do we divert funds / persuade funders to change the status quo from crisis management to active management and prevention…. ?
- More accurate data is needed around the cost of acute epilepsy care
- Evidence is needed that cost savings can occur with investment- local Data Worcester…

Thank you