
WALES CARDIAC PHYSIOLOGY WORKFORCE PROJECT

**Commissioned by
The Cardiac Networks
Co-ordinating Group**



About Tangerine Bee Analysts

- Rupa Chilvers, Director/Senior Analyst
- specialise in health and social care workforce analysis
- strategic level research including case studies, mathematical modelling and planning analysis
- completed a UK wide review of the cardiac physiology workforce on behalf of the British Heart Foundation in collaboration with the NHS Workforce Review Team
- working towards a methodology for regional level cost-based workforce planning models to assist service planning and delivery
- further information on www.tangerinebee.com or email projects@tangerinebee.com
- commissioned by the Cardiac Networks Coordinating Group to carry out an analysis on the cardiac physiology workforce in Wales

Aims of the Project

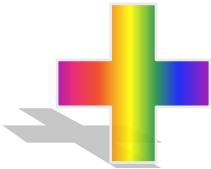
- Description of the workforce currently delivering cardiac physiology services including age profile; grade; specialist skills; skill mix, and local level workforce issues.
- Description of the current levels of demand, including activity levels and waiting lists.
- Potential future activity levels based on the Access 2009 targets.
- Potential directions for workforce development, new roles, and new ways of delivering the service with options for training to meet service demands.
- Quantitative projections for the future supply and demand of the service, including a projection to 2015.

Project Methodology

12 Trusts and 19 sites providing cardiac physiology services



Telephone Interviews



Reference Panel for assumptions testing

9 Week Project

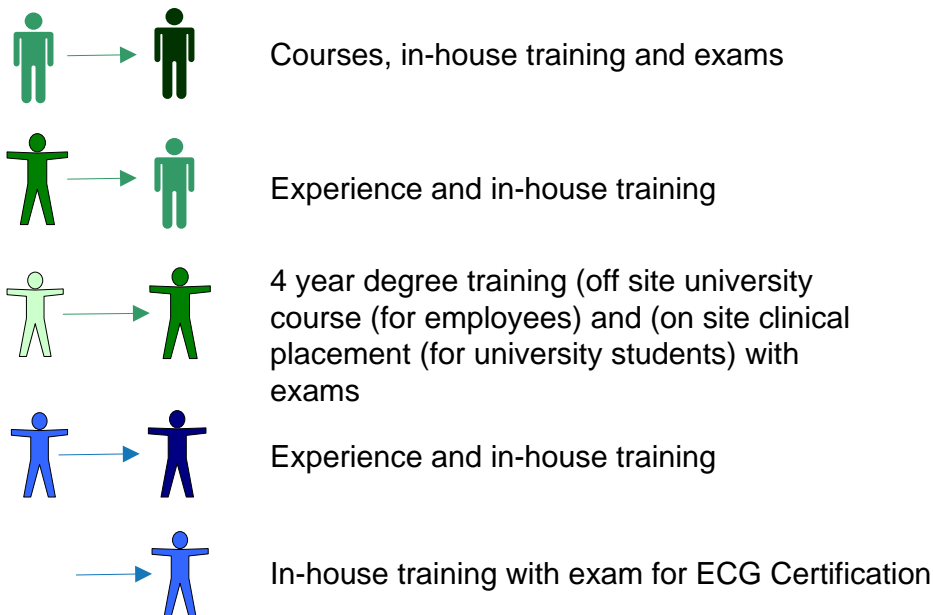
Workforce Data
19/19 Sites

Activity Data
10/12 Trusts and
13/19 Sites

Summary of the Findings

- Gap in projections between supply and demand continuing beyond 2011
- Immediate attention required to meet 2009 Access Targets
- Skill mix with both administrative and clinical support is instrumental in increased productivity and efficiency within departments
- Specialist training is essential in growing the required workforce
- Training models for new entrants into the profession needs to be reviewed and guarded to ensure future supply and demand
- Analysing changes in patterns for the different services within the department is essential for workforce design
- Contextual issues such as physical space, controls on referrals, and digital technology is likely to impact on service delivery

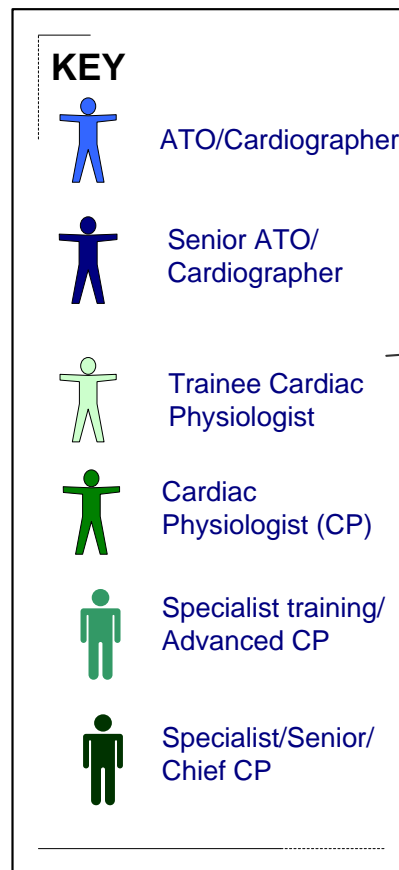
WORKFORCE DEVELOPMENT



Recruited through local press and NHS Jobs websites
(UCAS for university based trainees)



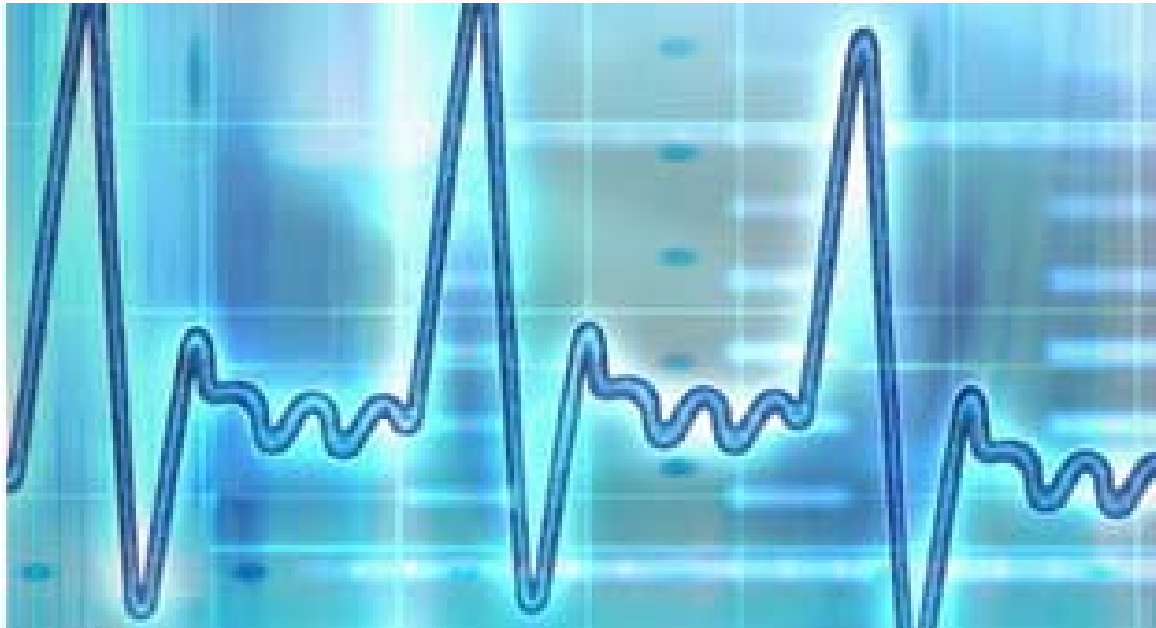
Advertising through SCST Journal, NHS Jobs websites,
Agencies (occasionally)



Current Route for Training in Wales

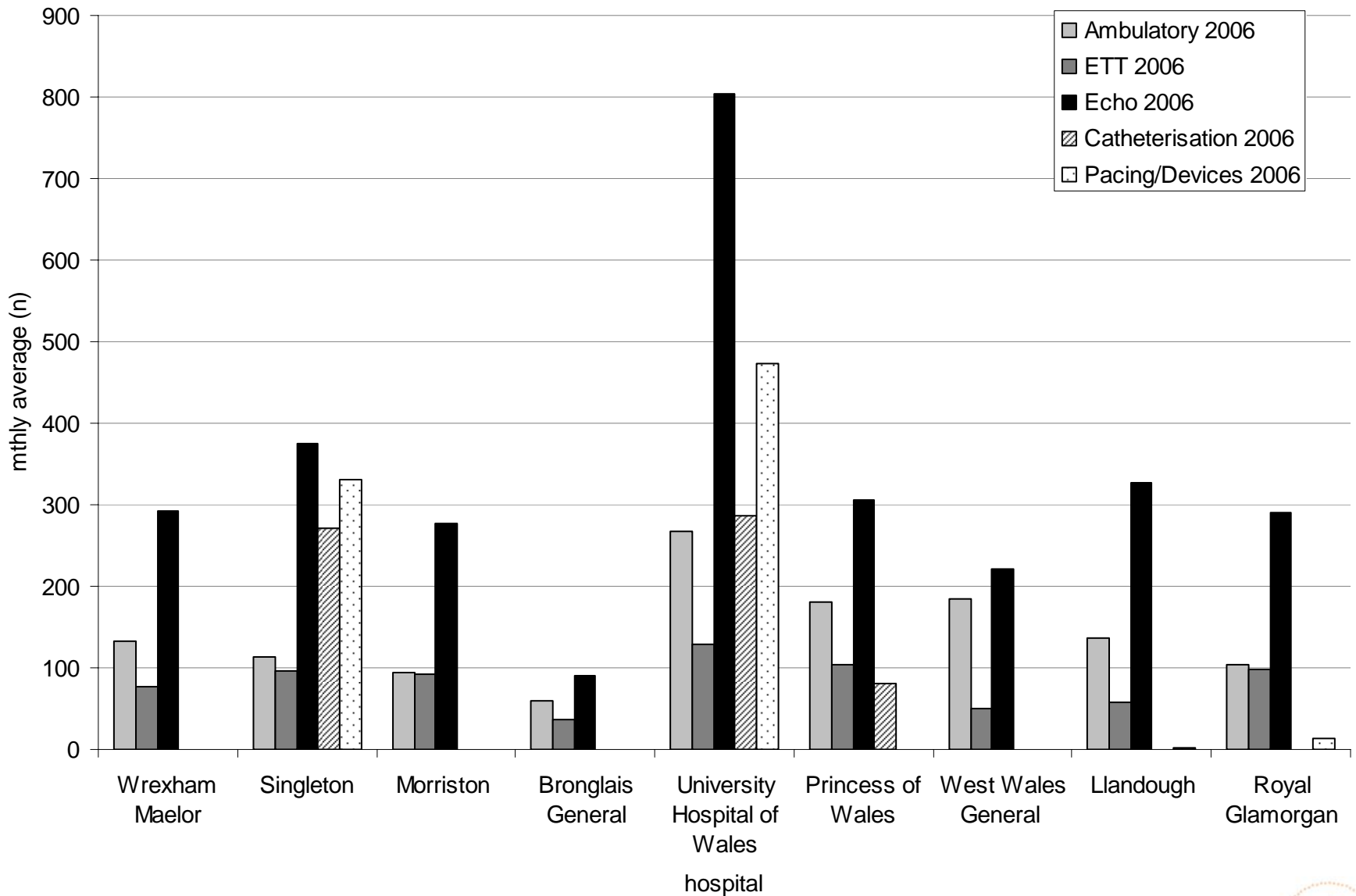
- University of Swansea (UCAS)
- Westminster University (Trainee)
- Manchester Metropolitan University (Trainee)

About the Cardiac Physiology Service and Context

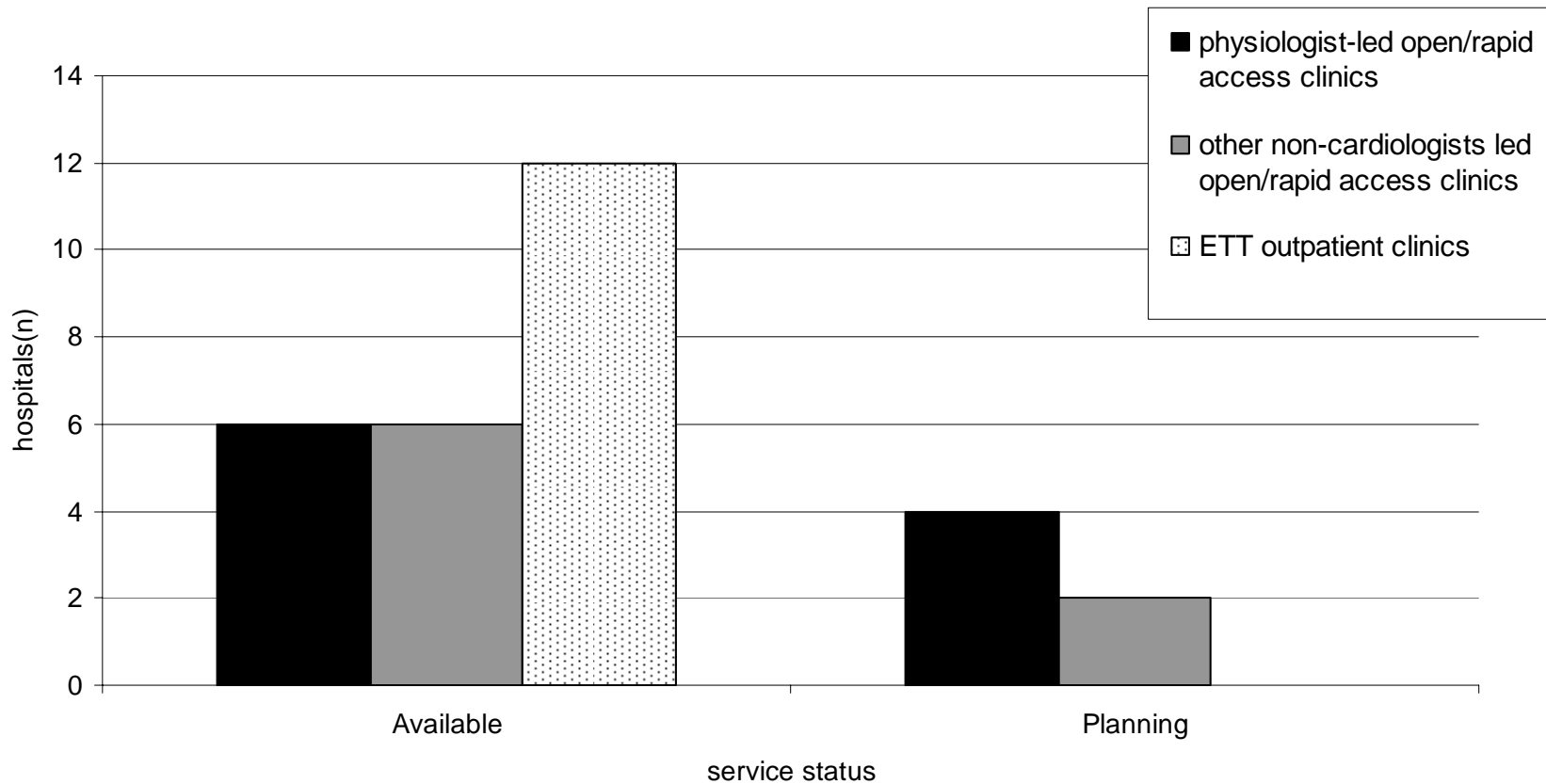


Service Delivery Headlines

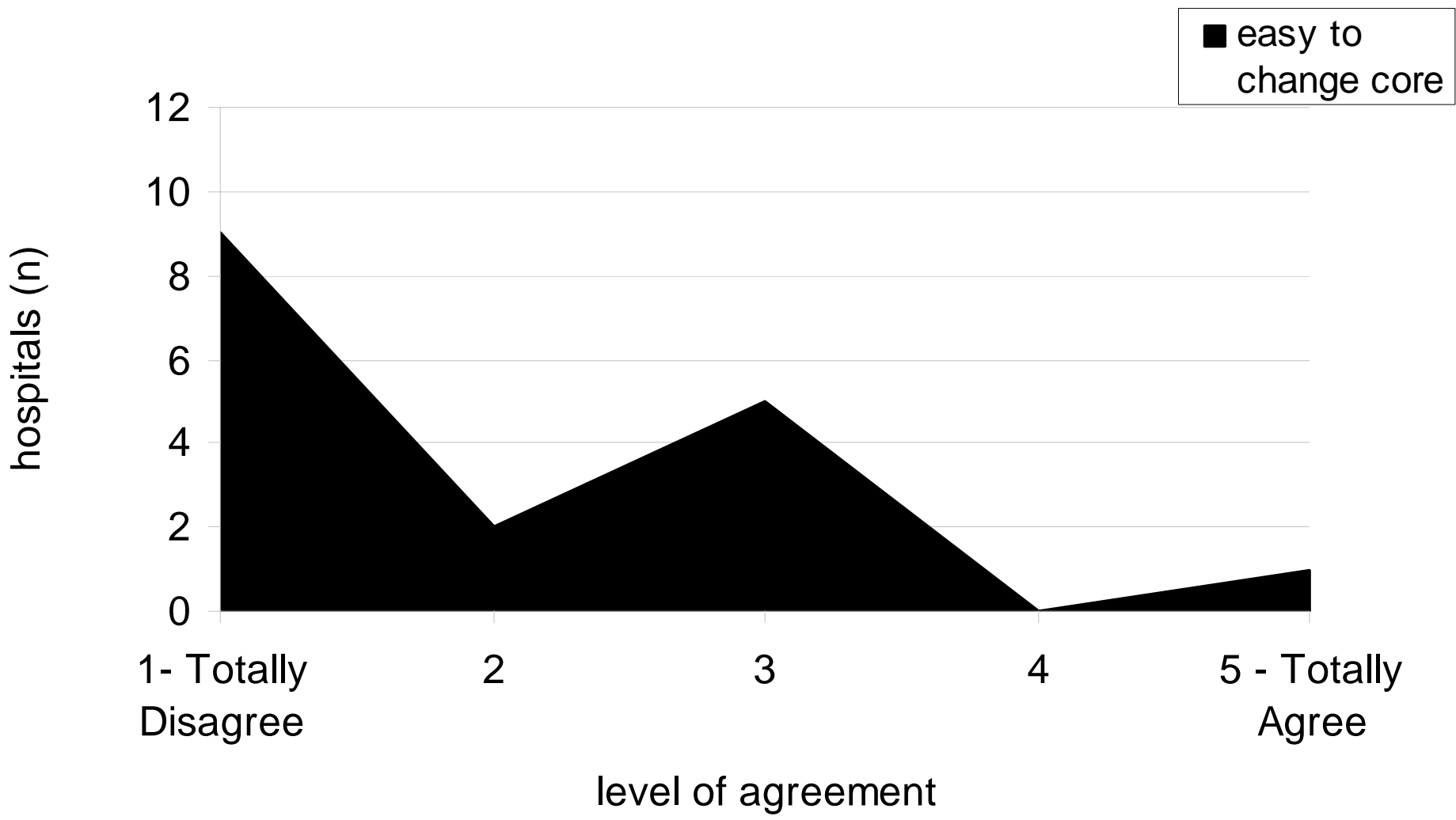
- 13 out of 19 units operate as joint respiratory and cardiac physiology departments
- All departments operate between 8.30 and 5.30pm with some exceptions for OOH service for ECGs (by ATOs) and emergency work
- Number of ECGs carried out vary from 350 to over 1500 per month per department
- Echocardiograms account for majority of the non-invasive workload
- Implant:Follow-up ratio is very high with UHW carrying out 48 implants and 425 follow-ups in 2006 (37 and 441 respectively for 2005)



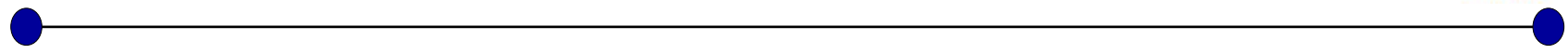
Monthly activity for cardiac interventions/ tests (2006)

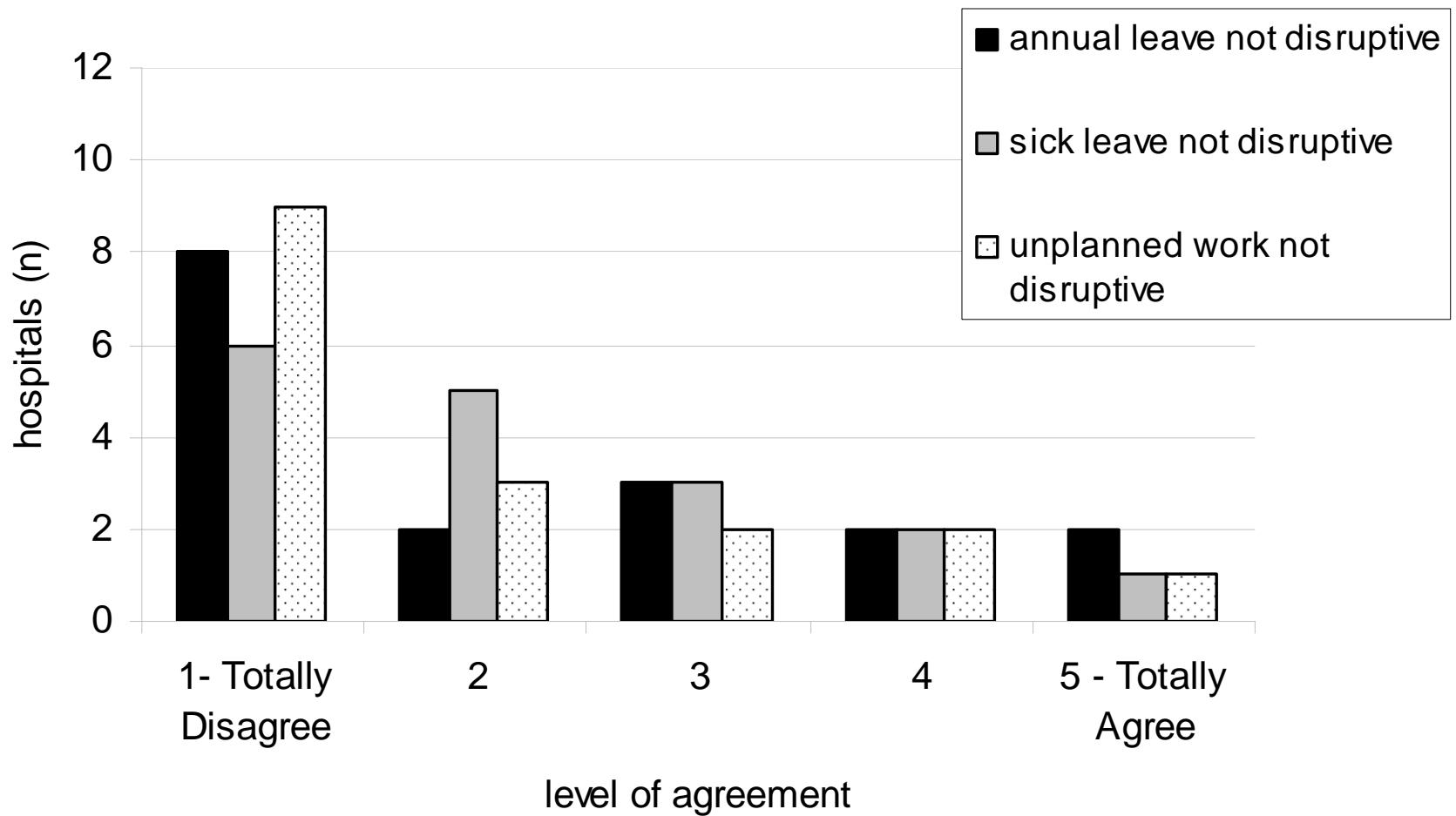


Number of sites carrying out or planning physiologist-led or non-cardiologist led open or rapid access clinics

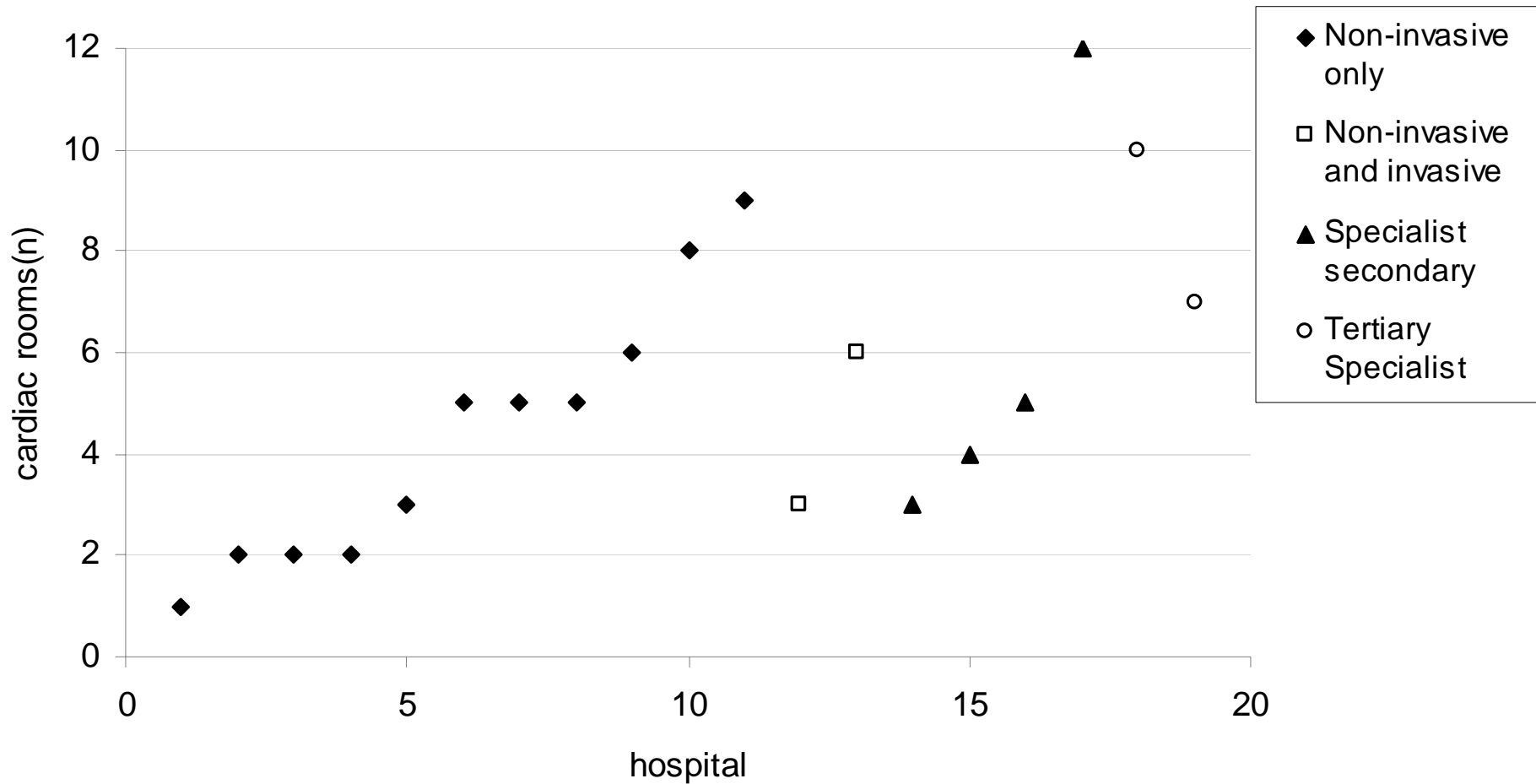


Level of agreement on the ease of changing core hours within departments

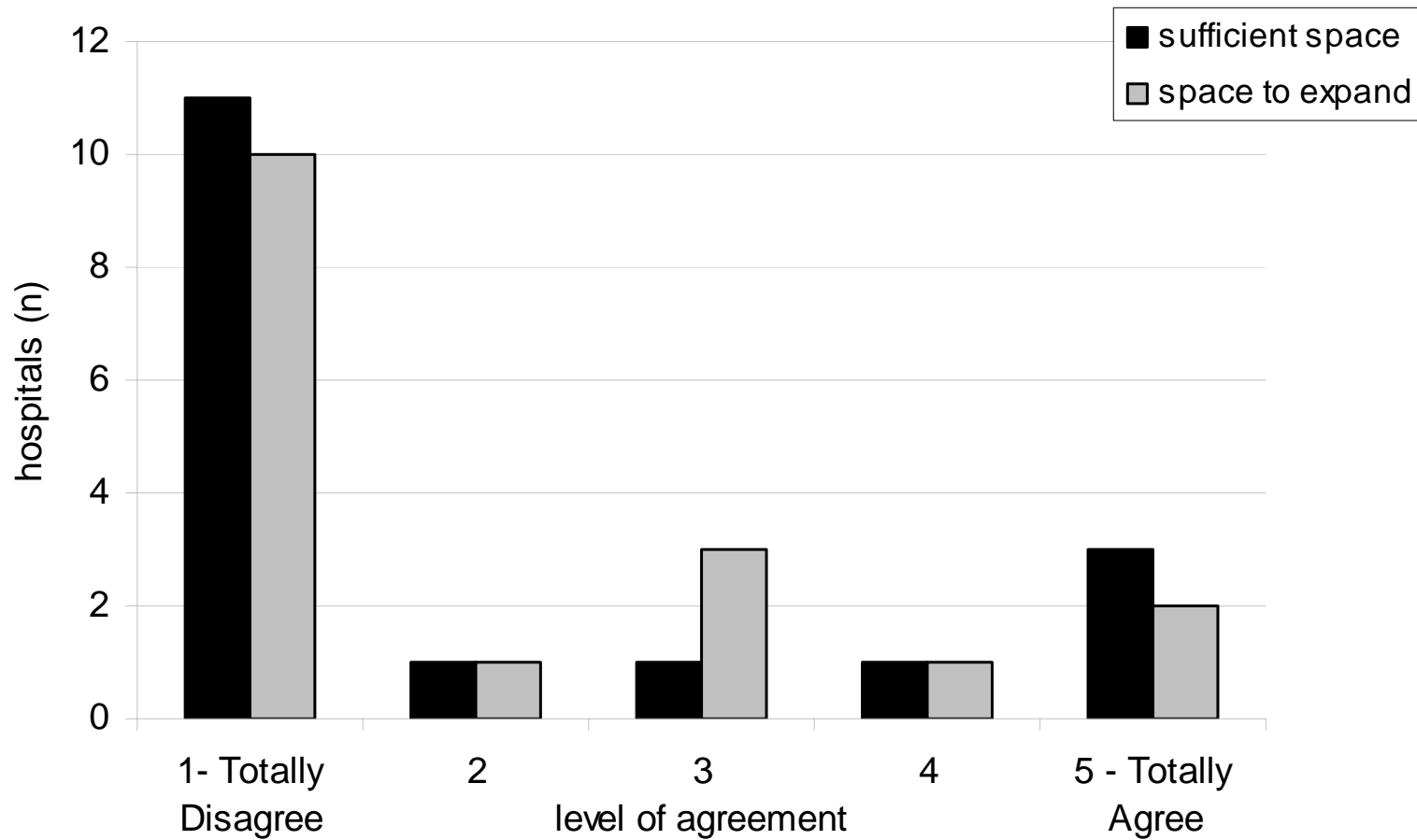




Level of agreement on the disruption caused by annual leave and sick leave taken by cardiac physiologists and the unplanned and inpatient work on services within the department



Number of cardiac rooms available for cardiac physiology services by type of service

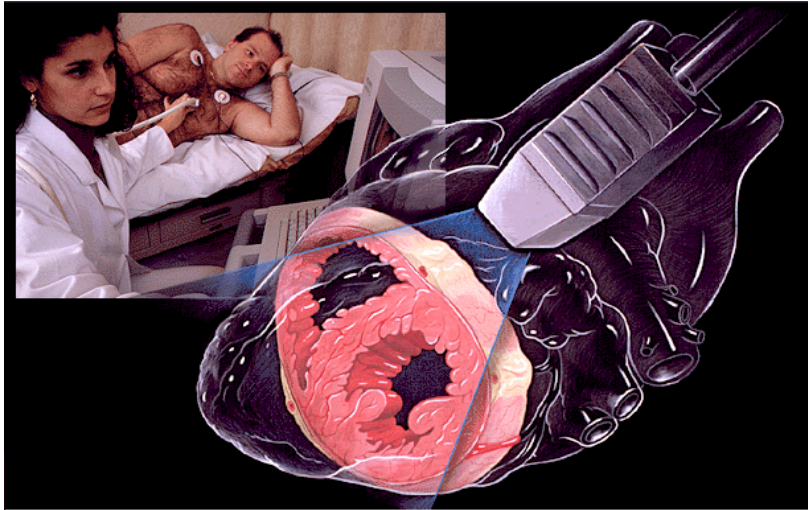


Level of impact of available space on current and future activity levels

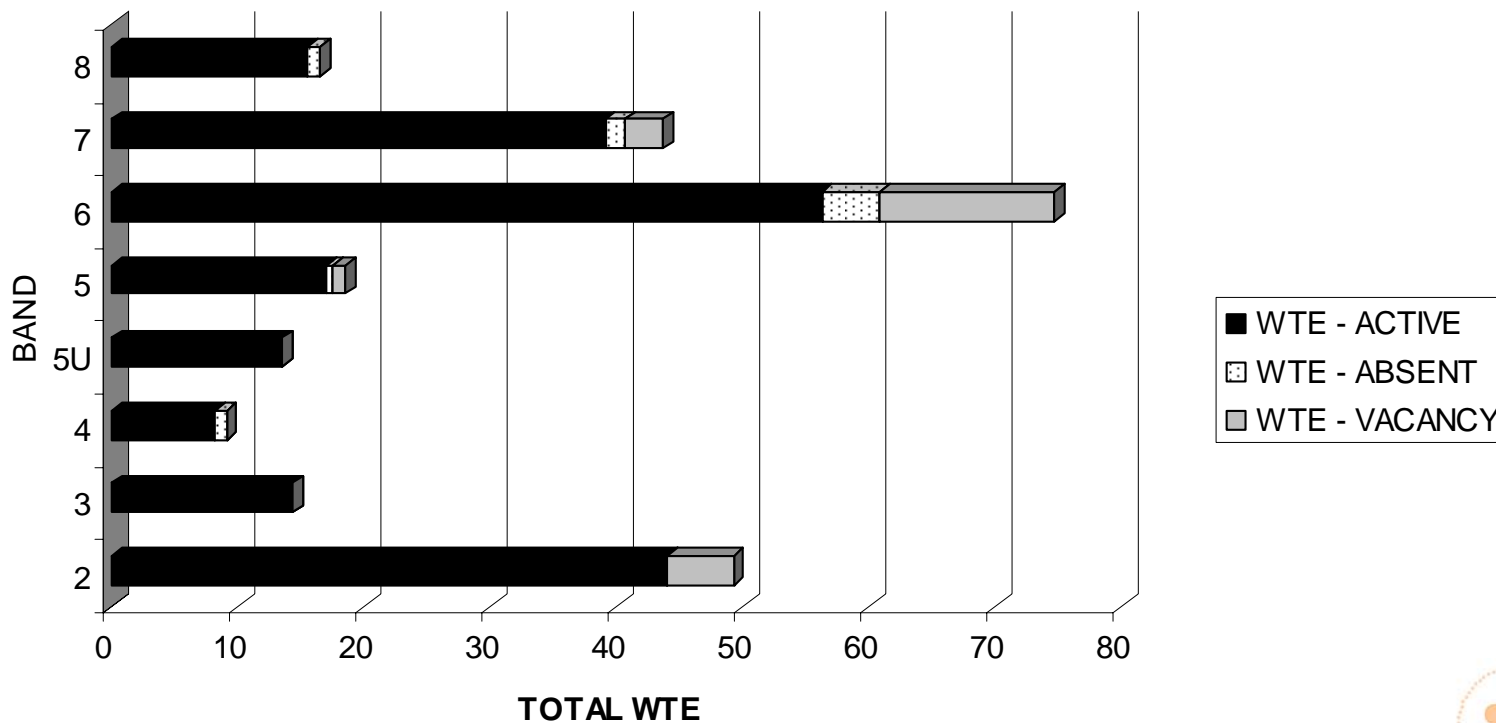


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analysts

About the Cardiac Physiology Workforce



249 individuals contribute to cardiac physiology service delivery in Wales (56% qualified, 7% in training) equating to 209 WTE



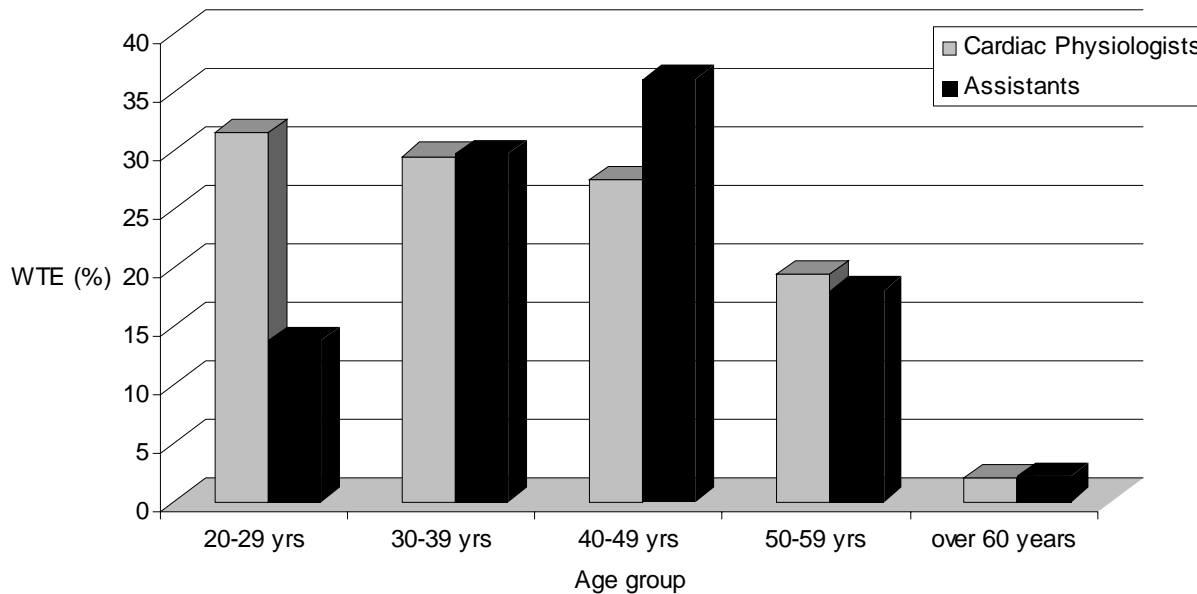
Cardiac Physiologist WTE by Band

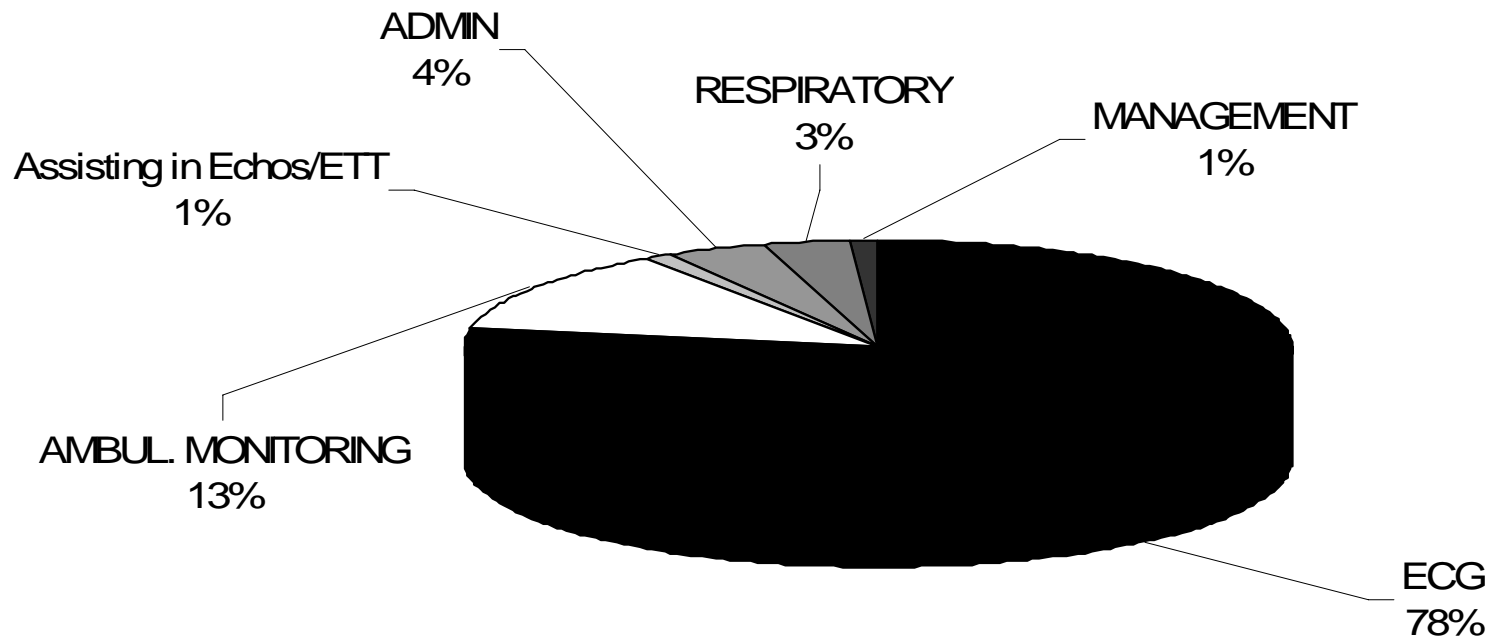
Cardiac Physiology Workforce Headlines

- Majority of the vacancies are in the South East with 7% vacancy rate for Assistants and 12% vacancy rate for Cardiac Physiologists
- Rate of absence was 1.4% (WTE=1) and 4.9% (WTE=7.6) for assistants and cardiac physiologists respectively. 4 WTE were expected to return by 2008
- Out of the 15 trainees, 12 already held a bachelors degree and a large proportion were fast track students
- 11 of the trainees were expected to graduate in 2008
- 83% of cardiac physiologists are female (98% of assistants) and 40% of the trainees are male

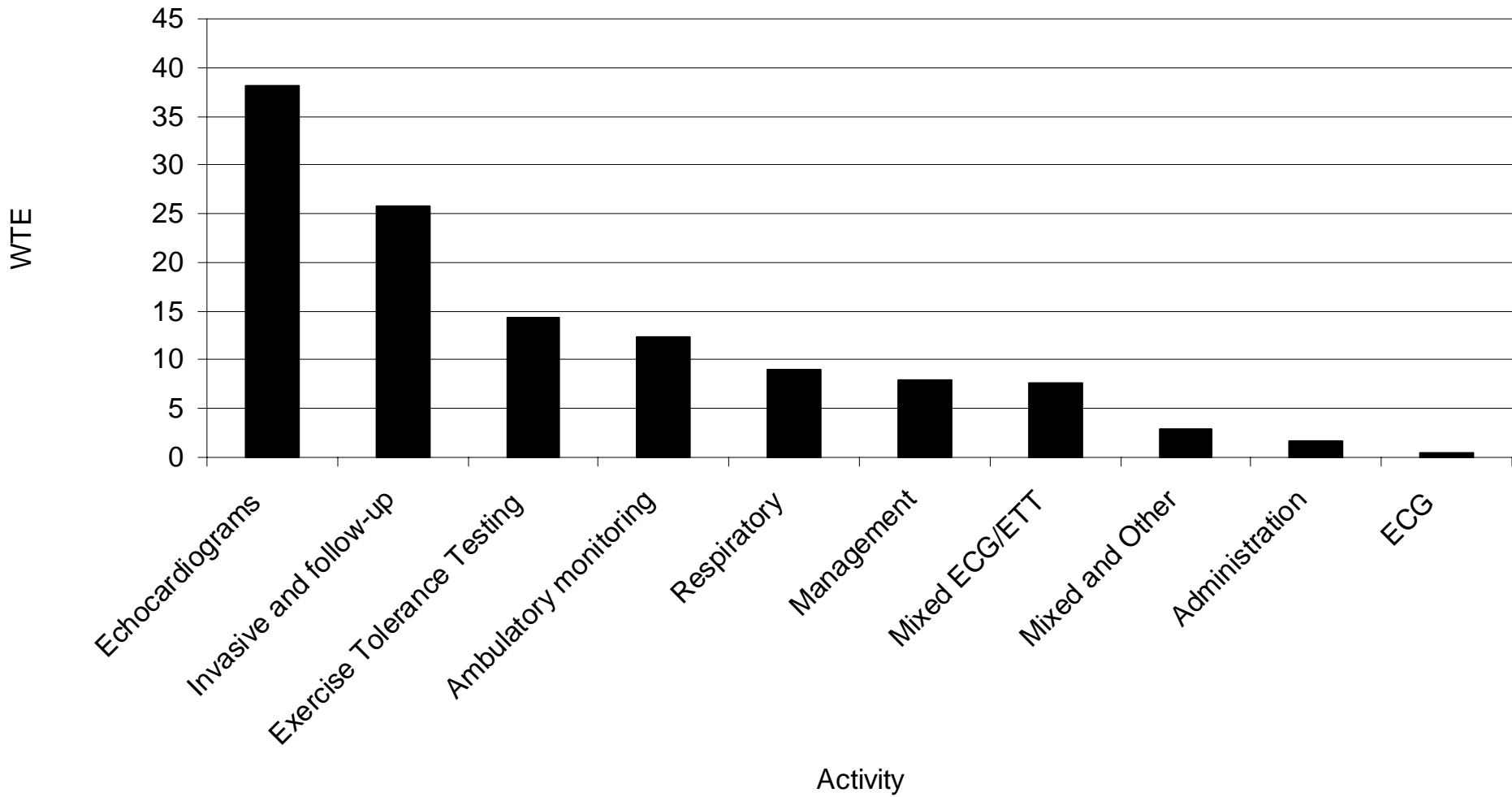
Cardiac Physiology Workforce Headlines

- 2% of the workforce will retire in the next 5 years with further 18% in the next 10-15 years:
 - 6 out of the 18 individuals in Band 8
 - 38 WTE in band 5 and 6 (1/5th of the current workforce)
 - equivalent of 5.7 WTE in echocardiography





Proportion of WTE spent on clinical and administrative activities by assistants

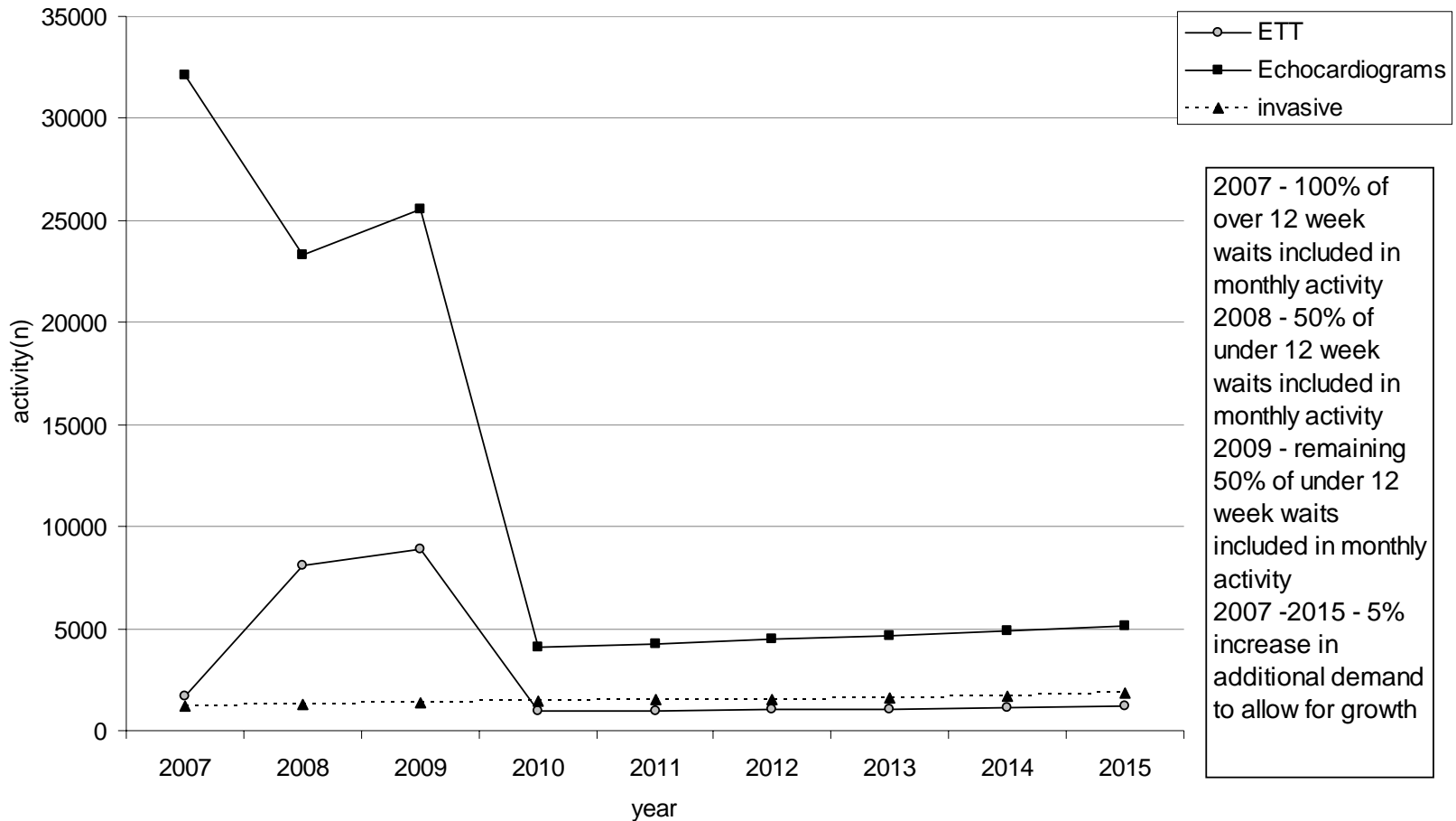


WTE spent on clinical and administrative activities by cardiac physiologists

About the Additional Demand, Targets and Projections

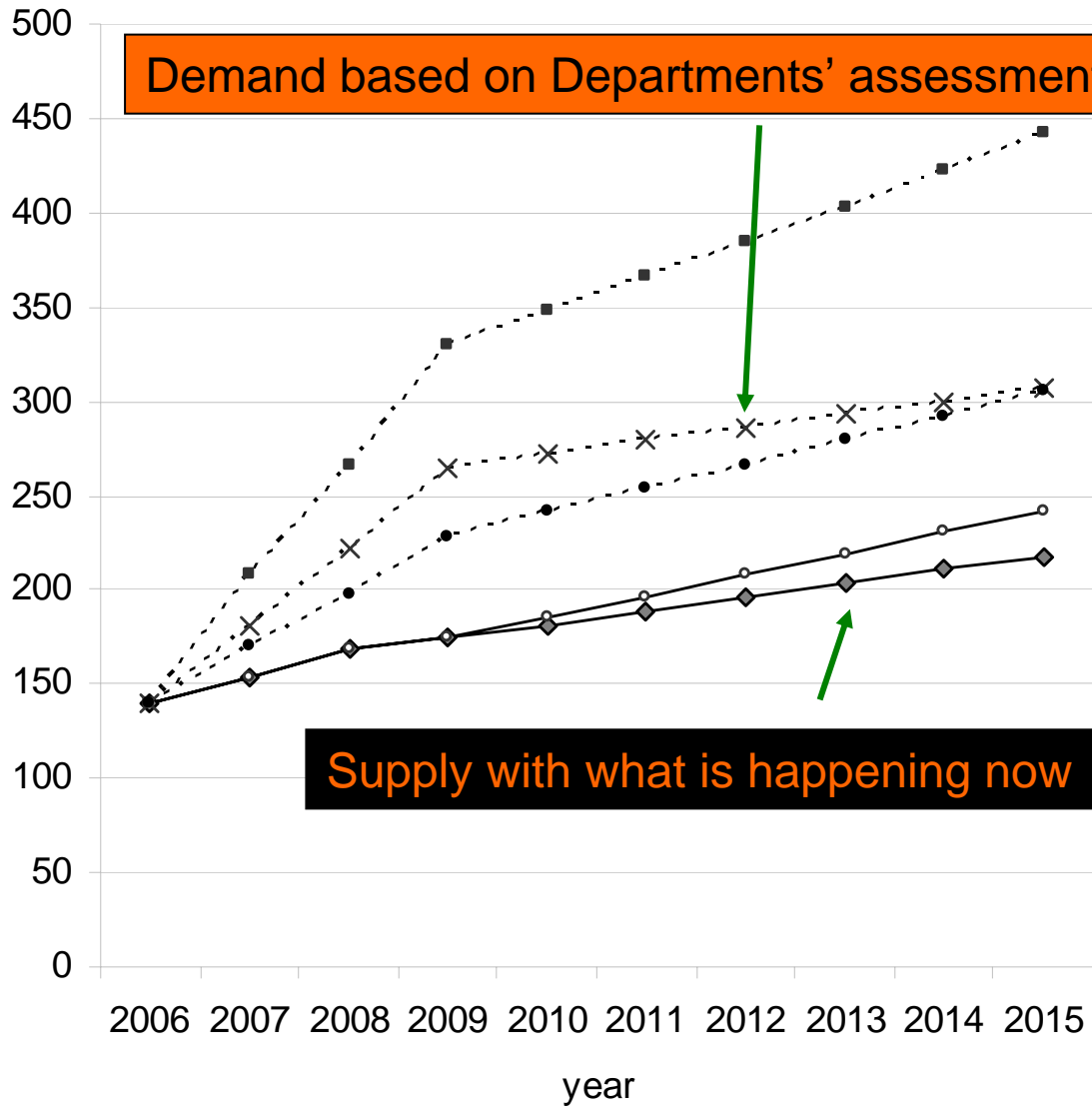


Additional Demand from Waiting Lists



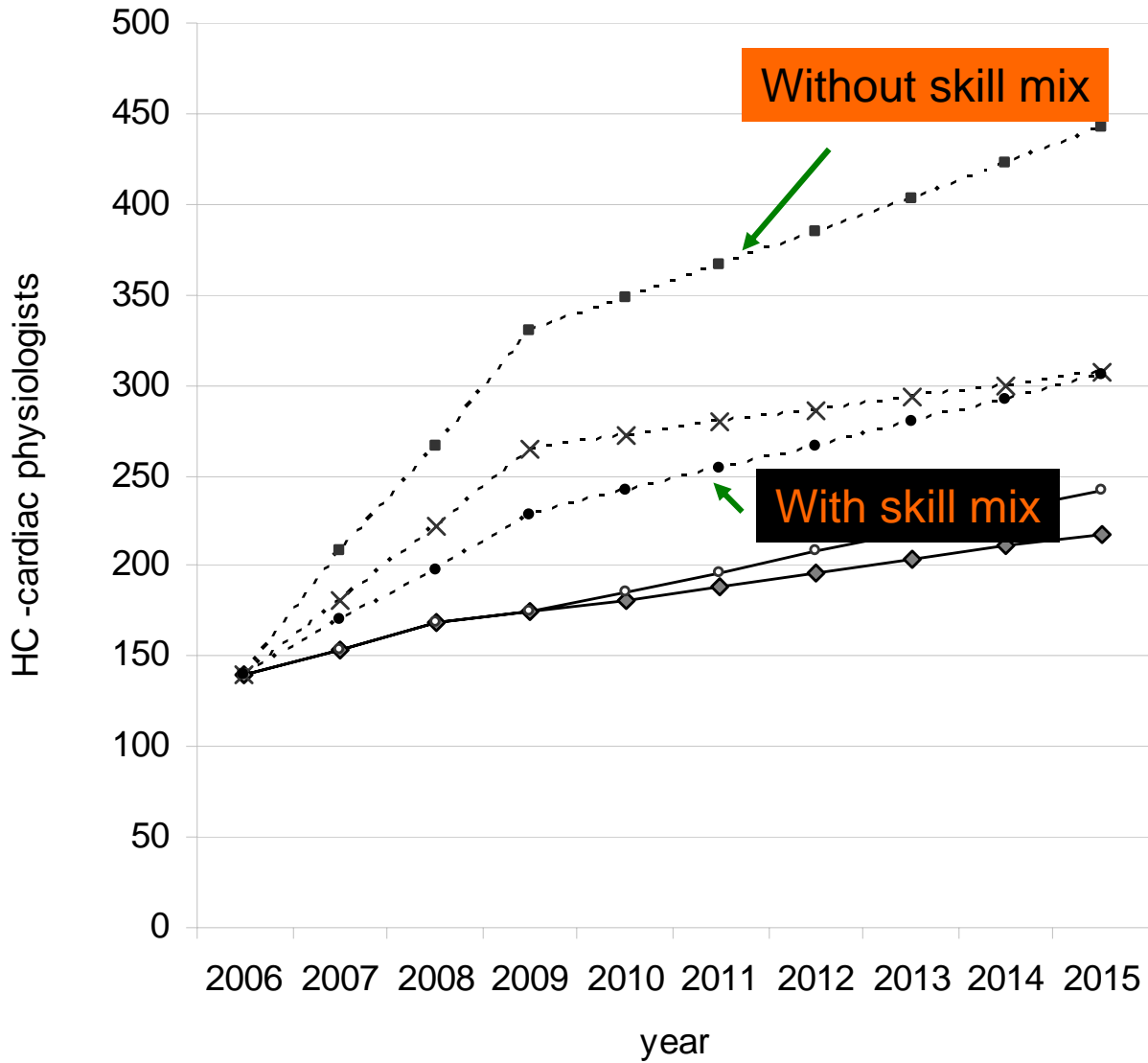
Demand based on Departments' assessment of Access target needs

Headcount -cardiac physiologists

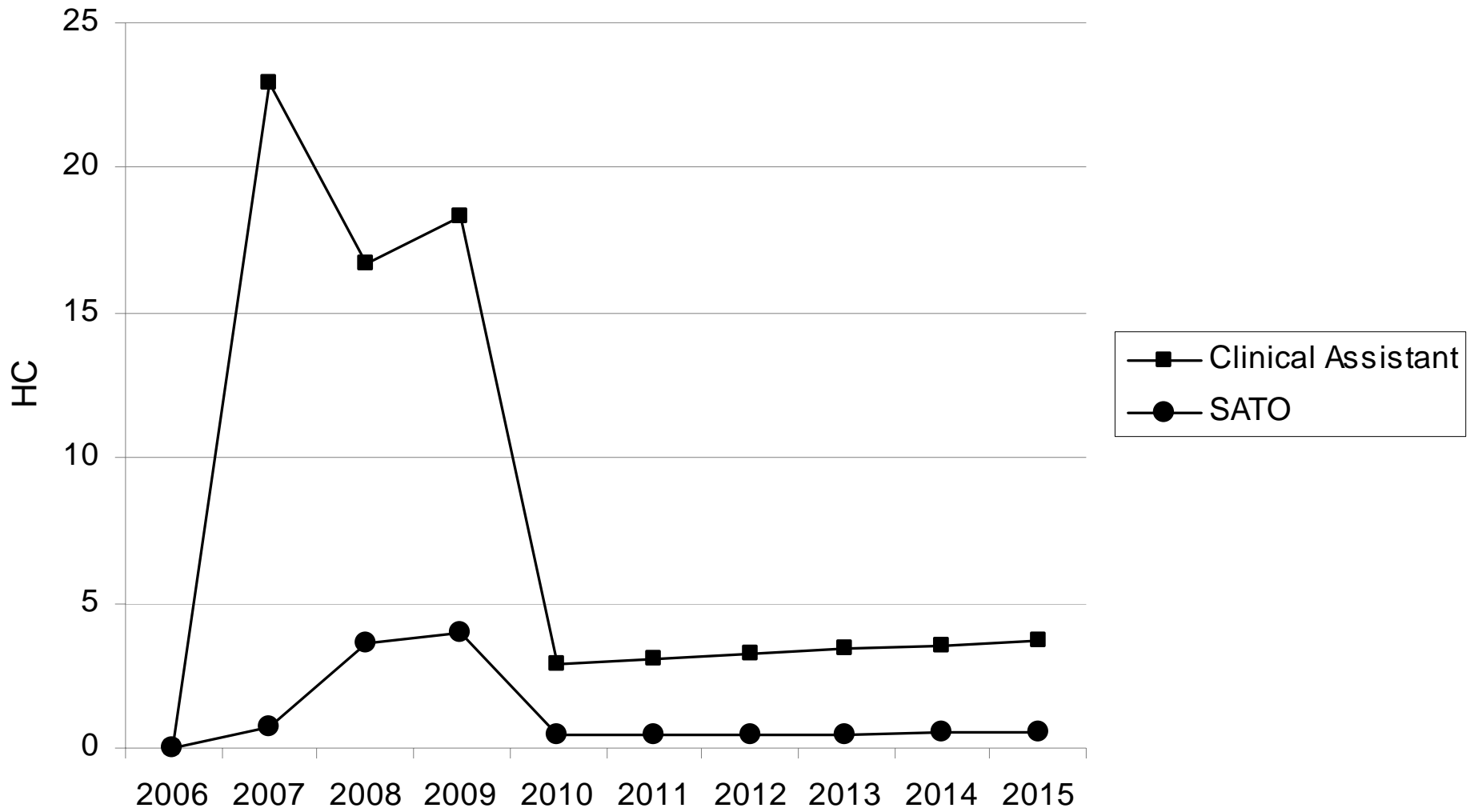


Supply with what is happening now

- ◆— Supply Projections
- Supply with 5 new commissioned
- - - x - - - Target- Capacity Planning
- - - ■ - - - Target - new activity (no skill mix)
- - - ● - - - Target - new activity WITH skill mix



- ◆— Supply Projections
- Supply with 5 new commissioned
- - - x - - - Target- Capacity Planning
- - - ■ - - - Target - new activity (no skill mix)
- - - ● - - - Target - new activity WITH skill mix



	HC - Gap for target based on capacity planning	HC - Gap for target - new activity WITHOUT skill mix	HC - Gap for new activity WITH skill mix
2007	28	56	17
2008	53	97	29
2009	89	155	53
2010	91	167	60
2011	91	178	65
2012	90	188	70
2013	90	200	76
2014	89	211	81
2015	89	224	87

Workforce Recommendations

- Increase in ATOs and Clinical Assistants to reduce requirements for large numbers of qualified professionals
- Training other healthcare professionals may ease some of the requirements (digital transfer of data may secure faster uptake)
- UCAS based training may be beneficial for all parts of Wales
- Scholarship model may provide a cost effective method for training
- Training requires support from Clinical Tutors and dedicated time
- Active recruitment may be more successful as region-wide events with innovative information dissemination techniques
- **Even with 5 more commissioned places and skill mix, gap in supply and demand for cardiac physiologists remains – 17 (2007), 29 (2008), 53 (2009)..... 87 (2015)**

We would like to thank the commissioners of this project - the Cardiac Networks Coordinating Group.

These project outcomes would not have been possible without the participants of the project. We would like to applaud the heads of departments, information officers and reference panel who all responded quickly with comprehensive levels of information to assist us with this project.



For further information on this project, please email rupa@tangerinebee.com or please call me if you would like to discuss the implications of these findings for service delivery in your area.

Thank you

