

networks have key roles to play in providing high quality care². This study reviews the development of local services provided by a paediatrician with expertise in cardiology (PEC).

Methods A retrospective review of paediatric cardiology outpatient activity over an 18-year period (1994–2012) was performed. Clinic numbers and patient attendance data were obtained from the hospital outpatient databases for three clinics: PEC clinic, specialist outreach clinic (SOC) and transition clinic (TC) for patients transferring to adult services.

Results There has been a substantial increase in outpatient activity over the last 18 years with a 93% increase in the total number of patient episodes. The increased activity (Figure 1) has mainly occurred in the PEC clinic with up to 70 PEC clinics annually. The SOC clinic has changed from a monthly clinic to a fortnightly afternoon clinic with a separate morning foetal echocardiography clinic.

The total number of patients seen has increased in parallel with the number of clinics. The 97% increase in new patients shows that increased patient load is not because existing patients are being seen more regularly, but new patients are being added at a consistent rate (Figure 2). The largest increase in new patients seen is in the PEC clinic with almost 65% of the patients being first attenders. Patients with significant heart disease are then seen in the SOC and TC where over 90% of patients are under long-term follow-up.

Conclusion This work clearly demonstrates the extent of expansion of local paediatric cardiology services provided by a PEC and specialist cardiologist over the last 18 years. PECs are ideally placed to deliver a cardiology service at secondary care level and work alongside tertiary centres to optimise workload. A PEC working in “network” can provide the type of care envisaged in the Safe and Sustainable review without overwhelming paediatric cardiologists.

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G73

OUTCOMES OF CHILDREN REFERRED BY GENERAL PRACTITIONERS TO PAEDIATRIC CARDIOLOGY CLINICS

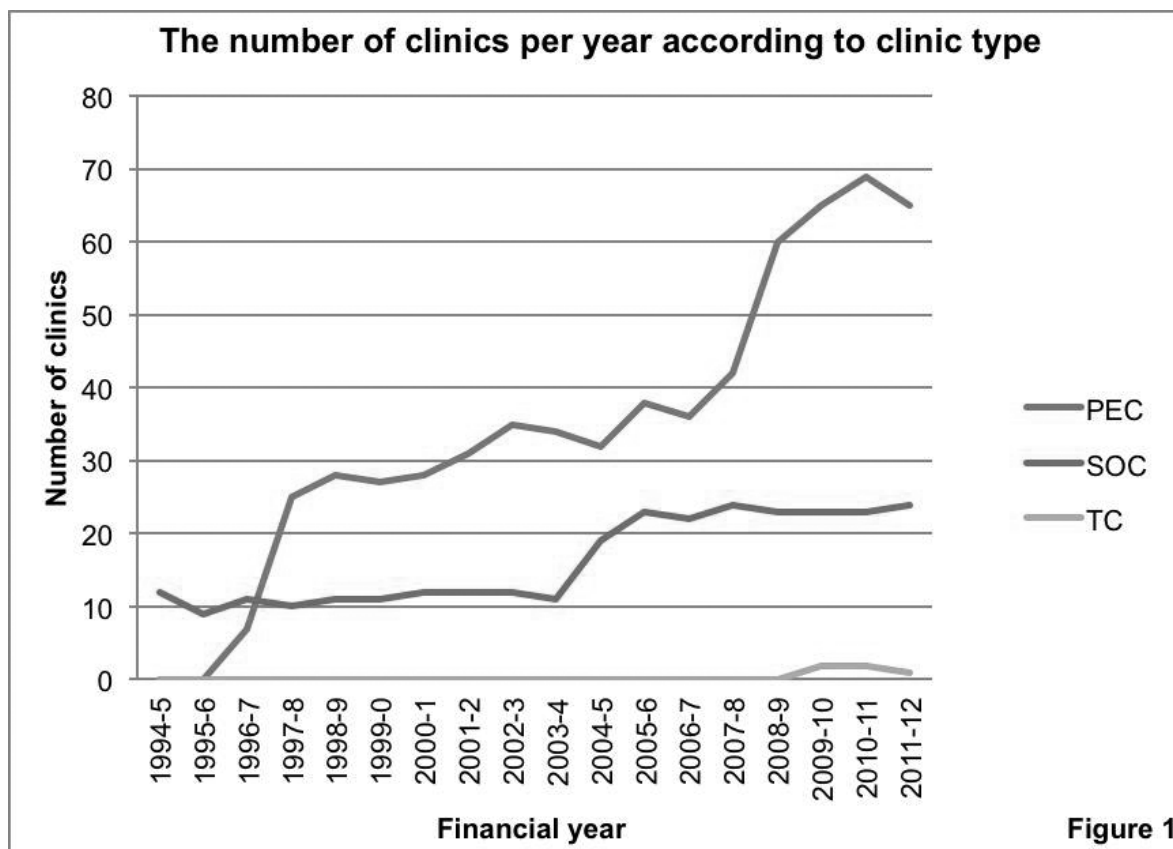
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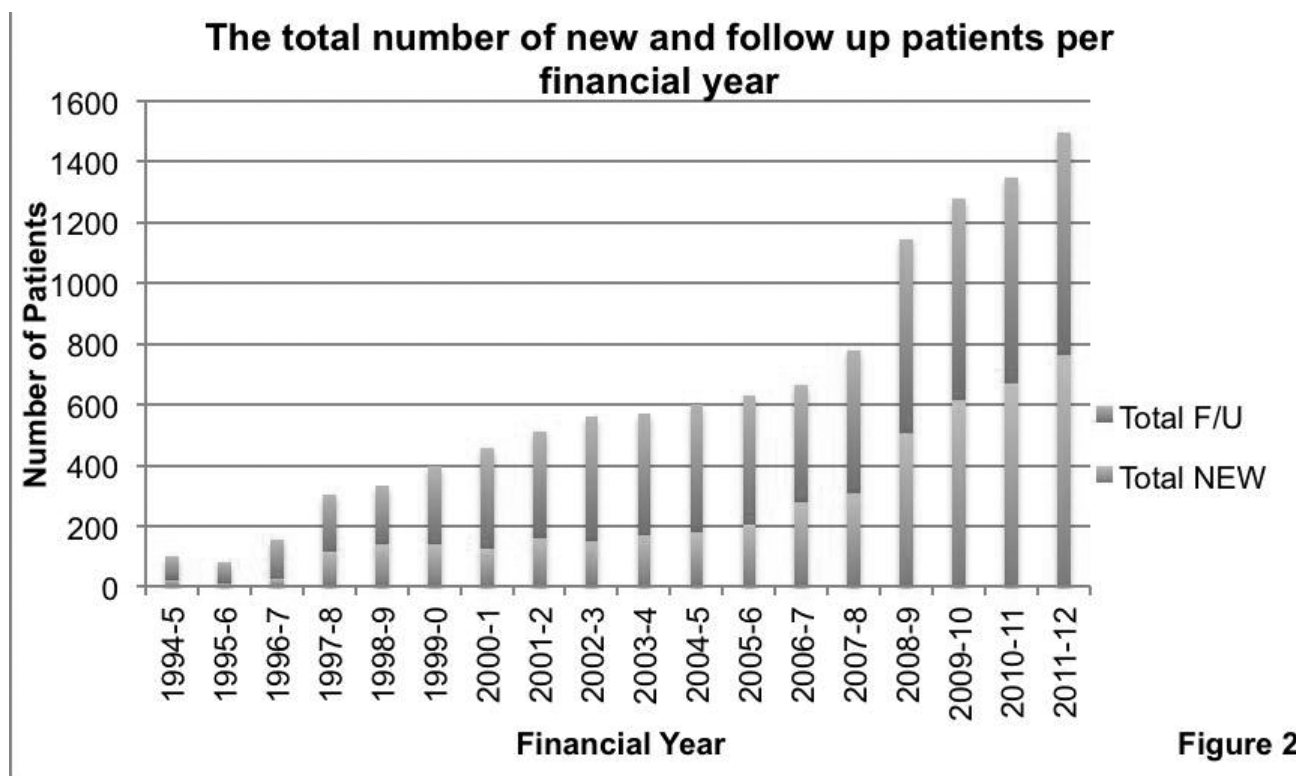
Aims Children are referred to paediatric secondary care by general practitioners (GPs) for numerous reasons. Cardiac complaints such as heart murmurs are common, and children with murmurs are referred for assessment which may include echocardiography. Given the increasing pressure to reduce referrals across all specialties, this study reviewed outcomes of GP referrals to a paediatrician with expertise in cardiology (PEC) to evaluate the use of echocardiography and provide guidance for GPs.

Methods We retrospectively reviewed electronic hospital records of children under 16 years old newly referred by NHS GPs to a local PEC clinic during 2011. We excluded children previously seen by any cardiology service.

Results Two hundred and seventy one children were referred, 165 (60%) were referred for investigation of a murmur: 137 for an asymptomatic murmur alone and 28 for a murmur plus either symptoms or family history of cardiac disease. All underwent echocardiography. 31 (19%) were diagnosed with congenital heart



Abstract G72 Figure 1



Abstract G72 Figure 2

disease (CHD) of which 7 have required catheter or surgical intervention (4% of the new GP referrals for assessment of a murmur). Younger children with murmurs were more likely to have CHD: 9/24 (37.5%) children under 3 months, 9/39 (23%) children between 3 months and one year, 10/58 (17%) children between 1–5 years, 1/14 (7%) between 5–10 years and none over 10 years. Forty nine children (18%) were referred for a family history of cardiac problems (e.g. CHD, cardiomyopathy) with 1 child having CHD that has not needed intervention. Other complaints included chest pain (8), palpitations (19), cyanosis (4) and syncope/dizziness (9). None of these other presenting complaints had any underlying pathology.

Conclusion The finding that a large proportion of children referred by GPs with asymptomatic heart murmurs have CHD supports current GP referral practise and the use of echocardiography for assessing murmurs. Children with a murmur under 3 months of age have the highest risk of CHD. In this review other presenting complaints do not seem to have any associated life-threatening heart disease – these children might initially be safely managed in the community without echocardiography.

G74 **MANAGING THE PATENT DUCTUS ARTERIOSUS – HOW, WHEN AND WHO**

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Aim To compare the differences in the management of the patent ductus arteriosus (PDA) between neonatologists and paediatric cardiologists in the context of the current evidence base.

Method Consultant and registrar neonatologists and paediatric cardiologists throughout the deanery were contacted via email to complete an online cross-sectional survey collecting quantitative and qualitative data on the management of a neonatal PDA. The

survey included 26 points and was largely scenario based. The questionnaire was validated through an initial local pilot. No ethical approval was required.

Results Of the 53 physicians contacted, 20 neonatologists and 26 paediatric cardiologists completed the questionnaire (87% response rate). Paediatric cardiologists are significantly more likely than neonatologists (60% vs 31%; $p < 0.05$) to use indomethacin as first-line medical management vs. ibuprofen. Furthermore, in complicated treatment refractory cases paediatric cardiologists are significantly more likely to consider ligation than neonatologists, the latter generally preferring a conservative 'no action' management decision (40% vs. 0%; $p < 0.05$). In addition, with respect to ligation, neonatologists considered haemodynamic effect significantly more important (4.4 ± 0.2 vs. 3.5 ± 0.2 ; $p < 0.05$) than paediatric cardiologists, although both neonatologists and paediatric cardiologists regarded patients symptoms as the most important determinant. In terms of knowledge of the current evidence base regarding prognosis there was no significant difference between paediatric cardiologists and neonatologists, however both varied considerably from published data, generally with an overly favourable outlook. Only 3% of respondents felt current guidelines were sufficient for PDA management.

Conclusion For the first time we have shown that the practises of paediatric cardiologists vary significantly from those of neonatologist when managing a PDA. These differences may reflect a lack of consistent data regarding PDA closure and highlight the need for greater guidance in this controversial area. We have shown such guidance to be in strong demand by physicians. Moreover, such work could facilitate a practise that better reflects the current best-evidence.

G75 **'A BOLT FROM BLUE – BE AWARE!!'**

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