

The clinical & financial impact of a new nurse-led service for the insertion of Implantable Loop Recorders (ILR) at UHL

Sue Armstrong
Advanced Nurse Practitioner

Lorenzo Bracaloni, Darren Turner, Dr Rajesh Chelliah,
Dr Ravi Pathmanathan, Dr Ian Loke, Dr Will Nicolson, Dr Peter Stafford,
Dr Alastair Sandilands, Dr Riyaz Somani, Professor Andre Ng

University Hospitals of Leicester 
NHS Trust

Caring at its best

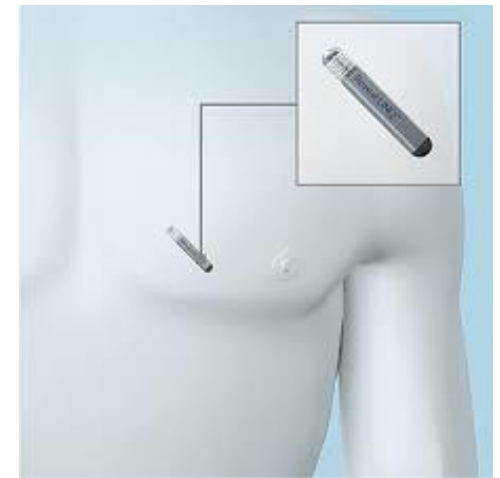


Background

- * Implantable Loop Recorder (ILR)
 - * patient and automatically-activated monitoring system that records subcutaneous ECG
 - * Injected subcutaneously with LA



Insertion of a Reveal Linq device using a bespoke injection tool



Service Provision

- * Historically implanted by senior medical staff
- * Allied Health Care Professionals trained
- * Waiting time of up to 15 weeks
- * No dedicated time on catheter lab list
- * Various operators



UHL Proposed ILR Service

- * Dedicated service for ILRs
- * Led by Allied Health Care Professionals
- * Proposed benefits
 - ✓ Improved time to diagnosis
 - ✓ Reduce bed days
 - ✓ Meet 6 week waiting times
 - ✓ Improve patient satisfaction
 - ✓ Maintain low complication rates



New ILR Service

- * Tues am in Decommissioned Lab
- * Radial lounge on ward 32
- * 2 qualified nurses
 - * Consented
 - * Antibiotic prescription (currently under review)
 - * Consultant available for advice
- * Company representative for technical support
- * 5 - 6 patients (ideally all MRSA screened)
- * Set up for home monitoring
- * Improved access for urgent cases, In patients
- * Same day implants from syncope clinic



Audit Objectives

- * Review of
 - * Service referral rates
 - * Implant numbers
 - * Financial impact
 - * Complication rates
 - * Indications of ILR
 - * Diagnostic information at:
 - * 1, 3, 6 & 12 months
- * Snap shot of service

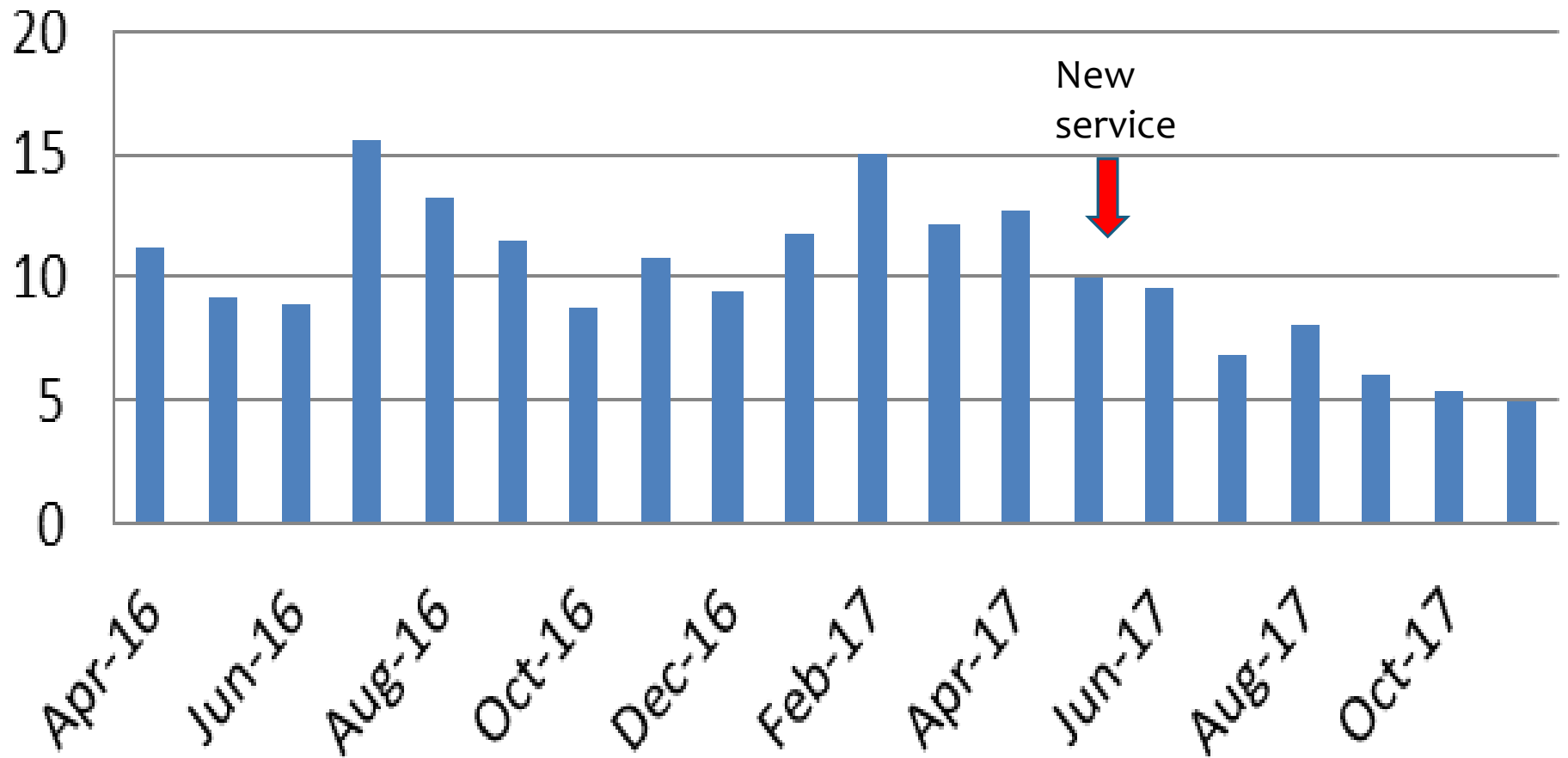


Clinical & Financial impact of the new service

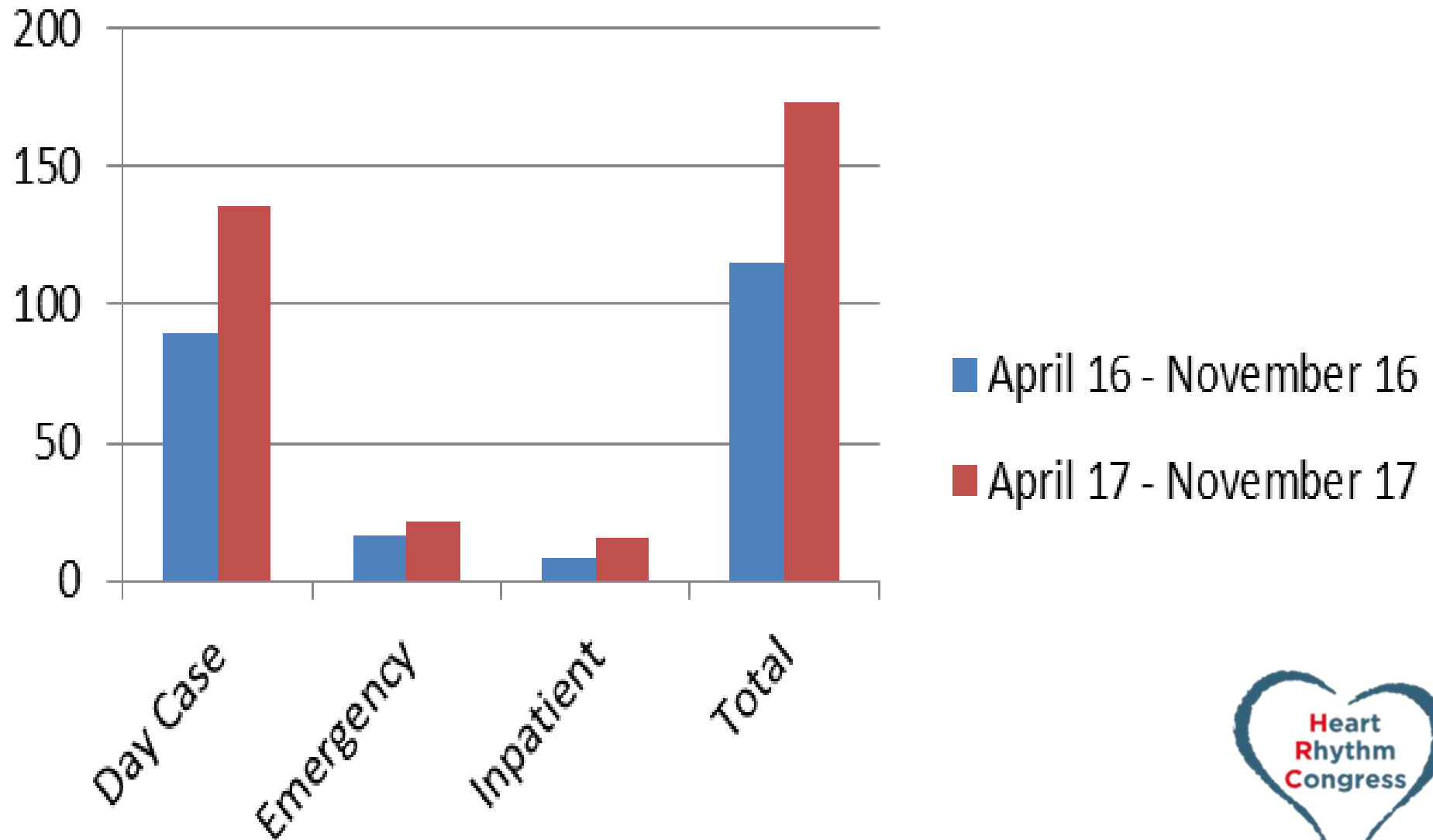
- * Service was reviewed between 2 comparable time periods
- * 6 months
- * April – November 2016 & 2017



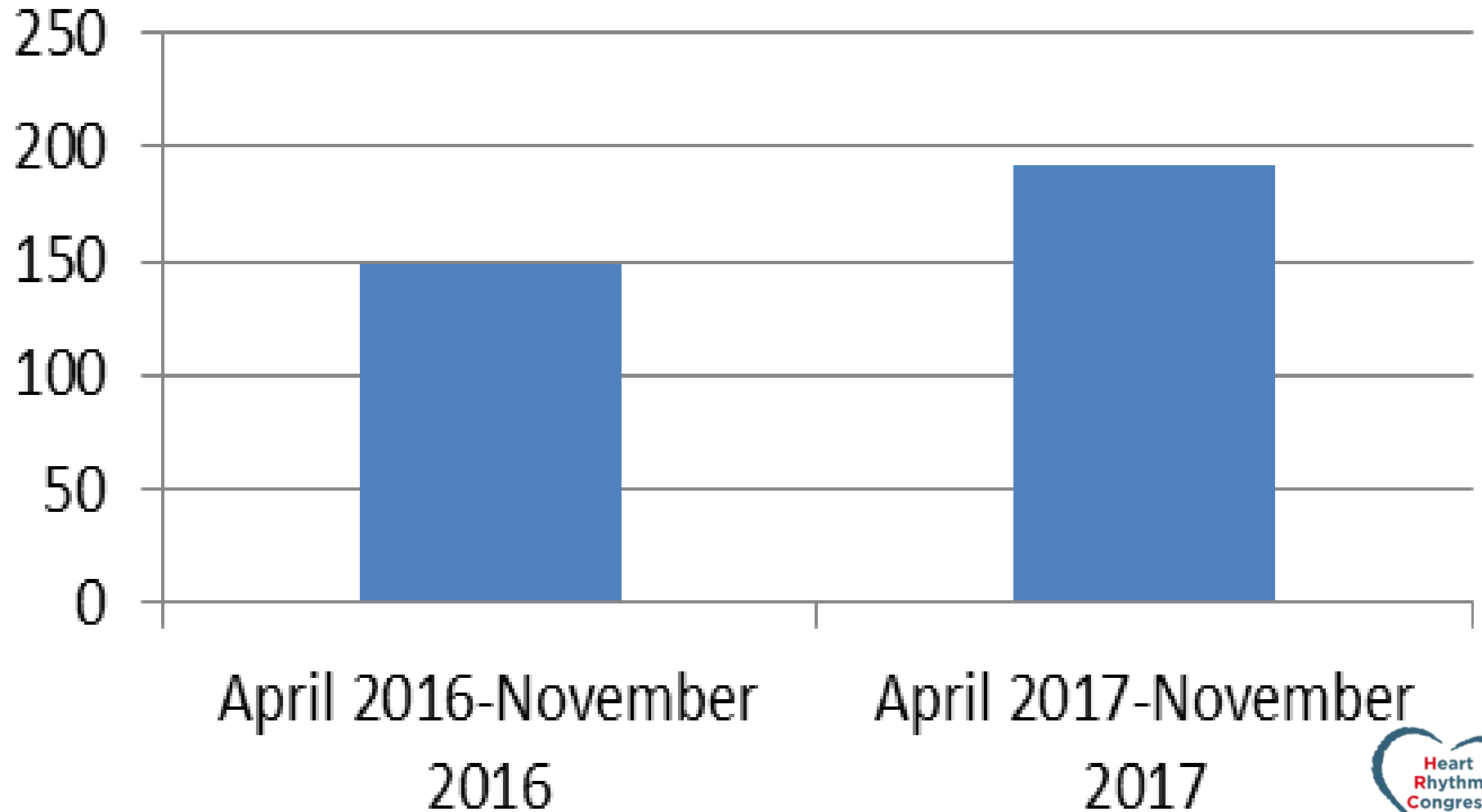
Average weeks waiting : Day case



Total Number of patients



Number Of Referrals



Complications

- * Medical implants
 - * infection rate was 1-2%
- * 2016 –
 - * 5 ILRs were explanted due to infection
- * AHCP - 87 devices implanted between the 2 operators
- * 2017 –
 - * 2 devices explanted due to infection,
 - * 1 treated with antibiotics superficial infection
 - * 1.7% infection rate
 - * Learning curve



Finance

	Previous model	New model
Cardiologist	£214.29	-
Nurse	£66.30	£132.60
Cardiac Physiologist	£58.71	-
Cath lab room	£891.27	£891.27
Day case bed x5	£1030	-
Radial Lounge	-	£172.55
Total	£2260.57	£1196.42
Cost differential		£1064.15

Cost per patient

£452

£238.51



Tariffs 2016/17

- * ILR device £1800 (including home monitoring)
- * Elective tariff
 - * £4,046 - 4,154.83 (2018 - £3,878)
- * Non elective tariff
 - * £6986 – 11,444.06
- * Income generated
 - * 2016 - £488,386
 - * 2017 - £721,493 (£233,107)



Conclusion

- * Safe
- * Effective
- * Streamlined referral & booking system
- * Improved waiting times and reduced length of stay
- * Increased flexibility and access
- * Increased access for other cardiac device patients
- * Achievement of the 6 week waiting target



Next steps

- * Training of other AHCPs
- * Evaluation of Patient experience of the service
- * Same day syncope clinic patients experience
- * Increasing implant numbers
- * Training in explants