**OBJECTIVES:** Surgical techniques including sentinel lymph node biopsy (SLNB) and 4-node sampling (4-NS) are currently used for axillary nodal assessment of early breast cancer (EBC) in the UK. Such procedures are associated with adverse effects. AEs, in particular, scar, pain, general anaesthesia and occasional lymphoedema which may impact on long-term quality of life. Magnetic resonance imaging (MRI) of the neck in prostate cancer offering the potential to avoid such AEs. A systematic review of MRI techniques, including USPIO (ultrasound superparamagnetic iron oxide contrast agent)-enhanced and gadolinium-enhanced MRI exist, however diagnostic accuracy of these techniques may be lower than for surgical techniques. An economic evaluation is undertaken to compare with surgical technology for assessment of axillary lymph node metastases in patients with EBC.

**METHODS:** The costs and benefits of replacing SLNB or 4-NS with MRI (replacement strategy) or adding MRI before the surgical techniques (addition strategy) were modelled using discrete-event simulation in SIMUL8®. A systematic review was undertaken to obtain relevant outcomes of the MRI techniques, whilst resource use data and health related utilities were obtained from the literature.

**RESULTS:** Our results predict that a replacement strategy for MRI, based on the pooled estimate of all MRI techniques, dominates the baseline SLNB and 4-NS strategies, as a result of avoiding AEs from surgical techniques. However, this strategy leads to more false-positive and false-negative cases. The MRI addition strategy may also be cost-effective, but is subject to greater uncertainty. USPIO-enhanced MRI produces the most favourable cost-effectiveness ratio, but the evidence is based on studies with small patient numbers. **CONCLUSIONS:** These results suggest that there is a potential role for MRI in any axillary nodal assessment of early breast cancer (EBC) since USPIO-enhanced MRI offers the most cost-effective option, but further large studies are required to obtain high quality evidence on diagnostic accuracy.

**RESULTS:** Gained with CRT-P at an additional cost of €11,200/QALY. As compared to CRT-P, €14,700, resulting in an incremental cost-effectiveness ratio of €3,500/QALY. Even though CRT-D may offer a survival benefit over CRT-P, the incremental cost-effectiveness ratio of €2,800/QALY is lower than the willingness to pay threshold of €10,000/QALY. These results suggest that there is a potential role for CRT-D in NYHA class III and IV patients if there is a willingness to pay more than €10,000/QALY. **CONCLUSIONS:** Based on the DRG casemix produced in the rythmology OR and the current tariffs, the experience of electrophysiologists involved and the annual activity. Economic analysis was performed to estimate the budgetary impact in terms of DRG risk result for hospitals, resulting from potential increased OR activity. **RESULTS:** Reduced procedure time was observed in six out of seven participating centres. The difference in median times was 35 minutes (p = 0.0192). There was significant variability of procedure times depending on hospital status (public or private), the experience of electrophysiologists involved and the annual activity. Based on the DRG casemix formed in the rythmology OR and the current tariffs, the mean revenue for the centre was estimated between 1100€ (private) and, 400 € (public) per hour of total OR time. **CONCLUSIONS:** Use of “Anatomically-Designed” PVI Catheters has the potential to substantially reduce procedure time and increase procedure capacity of rhythmology labs. Shorter procedure times allow better management of OR and treatment of more patients with potential productivity gains to hospitals that may offset the extra cost of the new techniques.

**OBJECTIVES:** To collect real-life data on costs and resource use, in order to understand the economic burden and potential of Fibrillation (PAP). Based on the DRG casemix produced in the rythmology OR and the current tariffs, the mean revenue for the centre was estimated between 1100€ (private) and, 400 € (public) per hour of total OR time. **CONCLUSIONS:** Use of “Anatomically-Designed” PVI Catheters has the potential to substantially reduce procedure time and increase procedure capacity of rhythmology labs. Shorter procedure times allow better management of OR and treatment of more patients with potential productivity gains to hospitals that may offset the extra cost of the new techniques.