The COVID-19 pandemic has intensified both the financial pressures and the inpatient capacity stresses that currently face many European healthcare systems. The expansion of ambulatory care has emerged as one potential solution. Health economics data suggest that ambulatory care is a more cost-effective and efficient use of hospital resources in comparison with inpatient care [1]. Surgery, especially in the USA, has been pioneering ambulatory care with hip replacement, knee replacement and laparoscopic cholecystectomy now considered as potential day surgery cases. Indeed, costs for these ambulatory surgeries are 25–68% lower than the equivalent inpatient surgery [2]. Interventional radiology (IR) is particularly suited to ambulatory care as the majority of cases are performed under local anaesthetic with a low-risk profile and rapid post-procedural recovery.

The development of ambulatory care in IR is challenging. CIRSE recently instituted a taskforce to address barriers facing the widespread adoption of ambulatory care throughout Europe. A survey was conducted across selected European centres in order to explore current ambulatory IR practices and investigate the challenges that these centres face.

Representatives from 45 centres across 21 European countries were asked to take part in the survey. A 66% response rate was achieved. All respondents were specialised IR consultants, and of these, 64% were IR departmental heads. Eighty percentage of surveyed centres were academic and 20% were non-academic. Fifty-three percentage were tertiary centres, 31% district general hospitals and 16% were private hospitals. Ninety-six percentage of centres currently perform ambulatory IR procedures, with an estimated average of 28% of total annual cases performed in the ambulatory setting. The centres began providing an ambulatory service on average of 11 years ago with a broad range of 1–30 years reported.

The initial cost of setting up or progressing an ambulatory IR service was seen as a major obstacle for the respondents. Requirements include access to hospital ambulatory care beds or creation of a radiology day-ward, patient-care pathways, pre-admission services, dedicated facilities to admit and discharge day-case patients, dedicated IR nursing, radiographers and administrative assistants, and this team must be involved in pre-admission, procedural care, day-ward care and follow-up care.

A significant preference for femoral over radial access for arterial procedures was reported from respondents but they reported that at < 2 h following haemostasis, 50% of patients were able to mobilise following radial access, in comparison with 6% of those after femoral access. Manual compression was the reported preferential method of achieving vascular haemostasis. Increasing the use of closure devices could be a further target to improve ambulatory care, as recent systematic reviews have reported a lower incidence of major complications [3] and a reduction in overall costs secondary to early discharge [4] with use of closure devices over manual haemostasis.

A wide variety of day-care IR procedures were reported including venous access, iliac/femoral angioplasty and...
stenting, UFE, PAE, varicocele embolization, dialysis fistula treatments, biopsies, joint injections and ablation and chemo/radioembolization procedures among others.

One of the most surprising revelations of the survey was that many centres reported a reduction in procedure reimbursement rates in the ambulatory setting in comparison with inpatient care. Respondents saw this as a major concern in order to set up a de novo practice or to further progress the ambulatory service in their centres. It is imperative that procedure reimbursement is harmonised to reflect an equal or even higher price for ambulatory procedures versus inpatient IR, in order to incentivise the transition to the same.

This mini-survey highlights critical procedural and management-level changes that should be implemented to expand and encourage the paradigm-shift of inpatient to ambulatory IR care.

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**Declarations**

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