Initiating a “Zero Acceptance for Poor Patient Preparation (ZAPPP)” approach in Interventional Radiology

University Hospital of Wales, Cardiff

Background
Failure of ward staff to adequately prepare patients for Interventional Radiology (IR) procedures is common, perhaps stemming from underestimation of the risks involved. Inadequately prepared patients have a knock-on effect, with significant lengths of time spent trying to resolve the problem, room downtime whilst the procedure is rearranged or the next patient sent for, and the inevitable postponements or cancellations. There are significant patient safety issues when attempting to undertake IR procedures without adequate preparation. To this end, we audited the process and launched a “Zero Acceptance for Poor Patient Preparation (ZAPPP)” initiative.

Methodology
Initial audit evaluated whether patients arriving in the radiology department had been adequately prepared for their procedures, looking at a number of aspects (where relevant). These were assessed by IR staff checking the patient in for the procedure:
- Had the patient been cannulated?
- Had the patient been fasted appropriately?
- Had antibiotics been given?
- Had bloods been done (and results available)?
- Had the patient been catheterized?
- Was the patient wearing a theatre gown?
- Did the patient arrive with notes (including observation chart, drugs chart, clerking)?

Results of first audit
Initial audit showed that only 58% of patients were adequately prepared for their procedures.

Action plan 1
This proportion was considered to be very low, and improvement was necessary.
A “radiology pre-procedural form” (A) was designed. This is printed on green paper (intended to stand out in the patient’s notes). A form is started by IR staff for each patient (taking into account guidelines/protocols for each procedure) and taken to the ward on the day before the procedure, to be completed by ward staff looking after the patient.

First re-audit
Reaudit showed that 63% were being adequately prepared for their procedures following the implementation of the form (which was also greeted positively by ward staff). However, it was considered that whilst better than before, this could be further improved.

Action plan 2
Some issues were recurrent, with ongoing delays, postponements and cancellations. Following meetings with other directorate managers, patient safety managers and the head of corporate risk and governance, we initiated our zero tolerance policy, ZAPPP. This involved both getting our own house in order and informing and educating clinicians and ward staff.

Through regular meetings between consultant, radiographic and nursing staff, measures we took to facilitate the introduction of ZAPPP included:
- Redrafting our “radiology procedure preparation guidelines” to more accurately cover the range of procedures undertaken and fast times and updating it on the intranet.
- Modifying our radiology procedure checklist and updating it on the intranet.
- Modifying BSIR patient information leaflets in line with our preparation guidelines and placing them on the intranet.
- Creating forms to send to the ward for patients who were inadequately prepared (different forms for those who were postponed (B), and those who were done out of clinical necessity).
- Creating corresponding emails to send to consultants with clinical responsibility for these patients, and a dedicated email account from which to send these emails.
- Creating letters for patients to explain why their procedures were postponed.
- Creating posters (C) to display in the department on the ward highlighting ZAPPP and measures to improve compliance.
- Giving presentations to clinicians, nursing staff and managers on ZAPPP in the department (e.g. during MDTs and drop-in sessions) and on wards.
- Presenting the policy to radiology staff at departmental audit meeting.

The final stage to unrolling ZAPPP was for the Medical Director of our hospital to email all directorates, highlighting ZAPPP and asking for compliance. A “go live” date was given. Prior to this date, we would trial ZAPPP by performing procedures in patients who had not been prepared as requested, if safe to do so. After this date we started postponing patients. The onus was also on ward staff to inform us that patients were ready for the procedure, rather than IR staff time being wasted trying to ring the ward.

Notes on ZAPPP policy
The policy covers all inpatients due to undergo an IR procedure, with the exceptions of emergency cases and select cases in which it is not feasible to prepare the patient as requested, following discussions between the consultant radiologist and the responsible clinician (e.g. in dialysis patients in whom venous access cannot be secured). Patients inadequately prepared for their procedures, in line with the radiology pre-procedure form instructions, will have their procedures postponed and return to the ward pending further discussion.

Second re-audit and further measures
In the first month after the official ZAPPP start date, compliance increased significantly to 85% (53% postponed, 10% inadequately prepared but performed when safe on grounds of clinical necessity). No patients were postponed during the first week.

Several months later, compliance is sustained at more than 80%. We continue to engage with clinicians and wards (particularly where recurrent problems are identified) and modify documents as necessary where potential flaws are encountered. Brief ZAPPP update meetings are held in the department every 2-3 weeks, with the aim to bring compliance to as close to 100% as we can.

Learning points and conclusions from ZAPPP
- Ensuring that the IR department has its own house in order is vital before unrolling a zero tolerance policy: ward staff need to know exactly what is expected.
- Engagement by all IR staff is necessary, if one consultant fails to postpone a procedure where clinical necessity is present, the other consultant is responsible.
- Some of the reasons for postponement might seem trivial, but every aspect of trying to sort an inadequately prepared patient can take time and lead to postponement of subsequent patients.
- Clinical judgement is vital: we undertake urgent procedures where possible, but failure to clerk and check bloods usually renders it unsafe (and often means less urgency than initially implied).
- Feedback from the majority of clinicians and ward staff has been positive, with most supporting the policy’s aims of improving patient safety and avoiding cancellations or prolonged admissions.