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Introduction

- Many Interventional Radiology (IR) procedures require Informed Consent (IC)
- Giving IC for pediatric procedures is difficult for parents, and time consuming when done thoroughly
- IC immediately prior to a procedure is very stressful for families
- Ideally:**
 - IC should be obtained well in advance, or temporally separate from the procedure
 - IC in advance allows parents to absorb information provided without time constraints
 - Having obtained IC in advance may avoid delays and increase efficiency on the day of the procedure
- In Reality:**
 - IC is often obtained immediately prior to the procedure in a busy pediatric IR service
- Thus, we developed a Quality Improvement (QI) Initiative for IC to be obtained in advance

Objective:
To increase the proportion of cases in which we obtain IC in advance

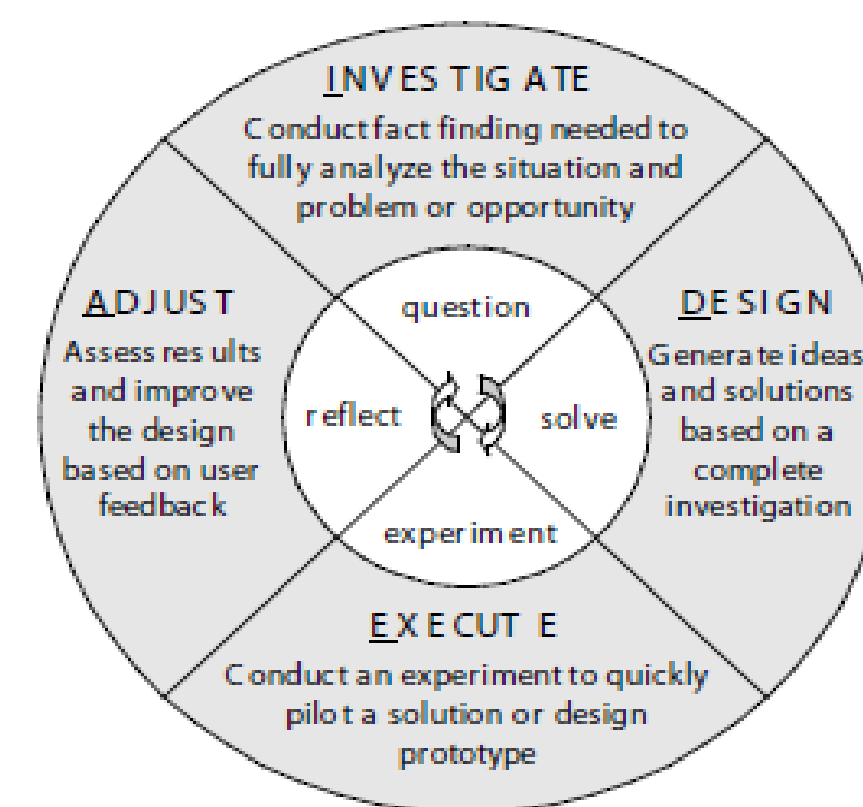
Materials and Methods

Setting: A pediatric tertiary care academic hospital serving children (neonate - 18 yrs)
A busy IR (Image Guided Therapy, IGT) department (> 5000 cases/year)

Patient Population: Approx 50-60 % of all IGT cases require IC to be obtained
Approx 50% cases are urgent add-ons, without opportunity for IC in advance

Definition: "IC in advance" was defined as:
Consent obtained ≥ 1 day prior or ≥ 2 hours in advance of a same procedure and in a separate encounter with parents

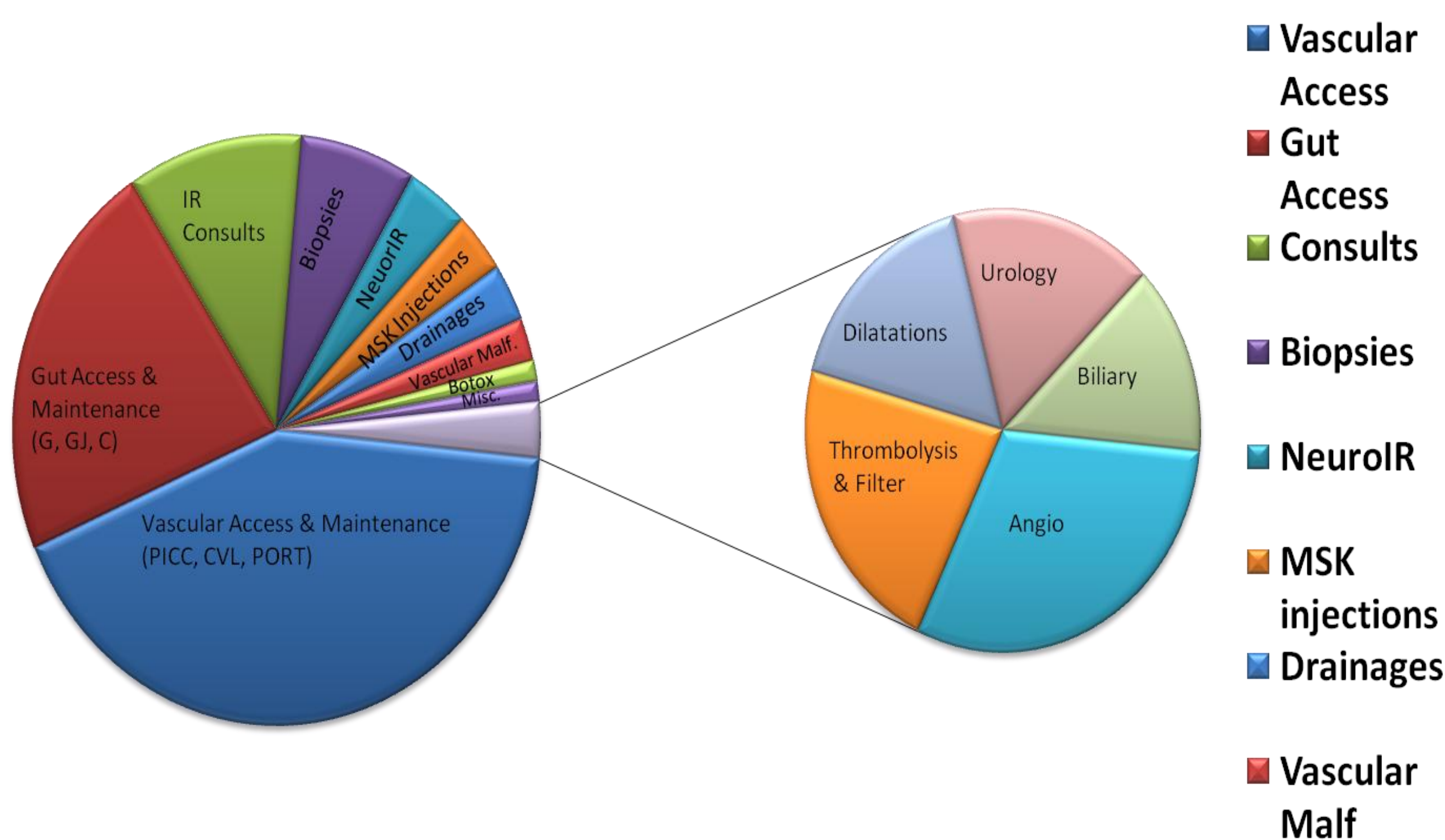
Method: Multiple **IDEA loops** (Investigate, Design, Execute, Adjust) similar to PDSA (Plan, Do, Study, Act) cycles



1. INVESTIGATE:

- Mapped the current process and current state by:
 - Created Flow chart of process for obtaining IC, both detailed and top level
 - Analyzed case profile in IGT (Fig 1)
 - Analyzed prior IC forms by reviewing the IC forms from 1 week every month
 - Determined proportion obtained in advance
 - Analyzed type of cases and reasons why consent not obtained in advance

Fig 1. Analysis of cases done in IGT in 2010



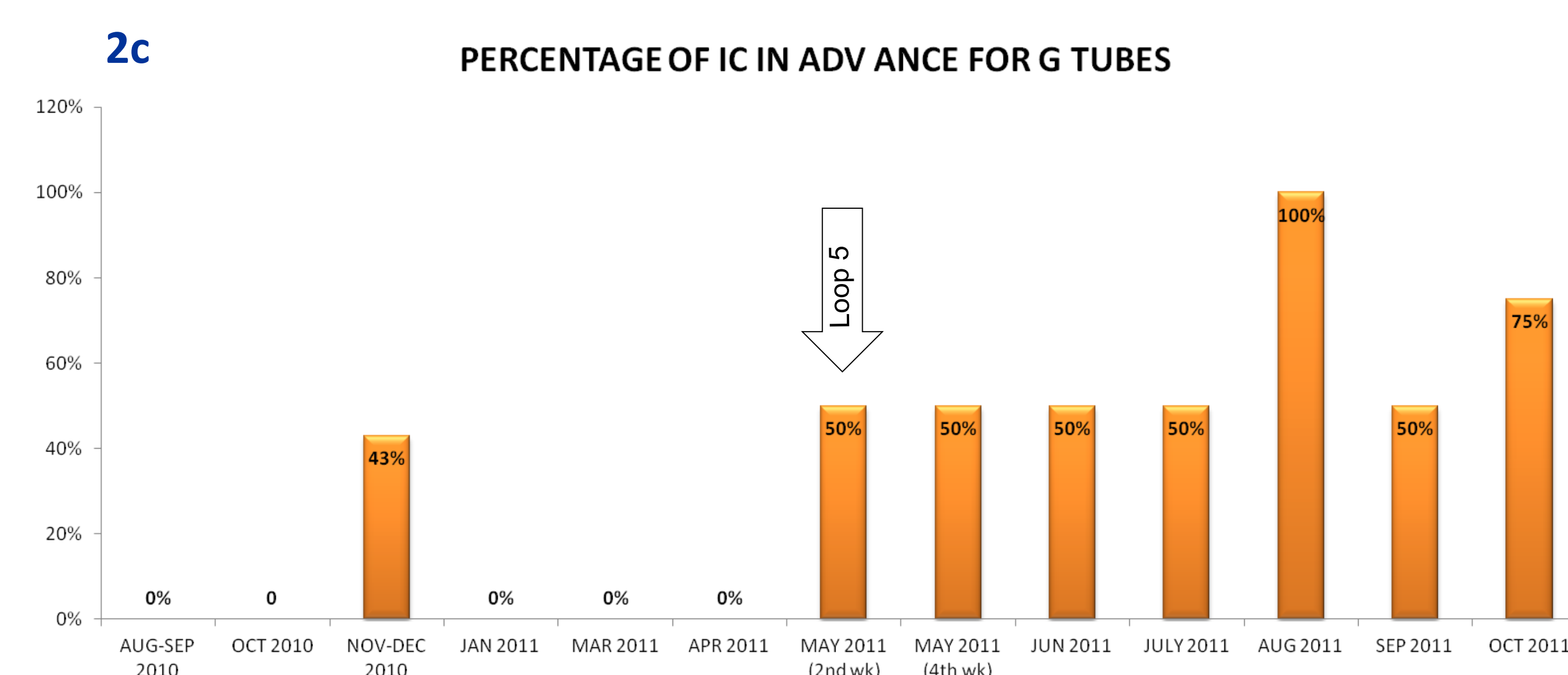
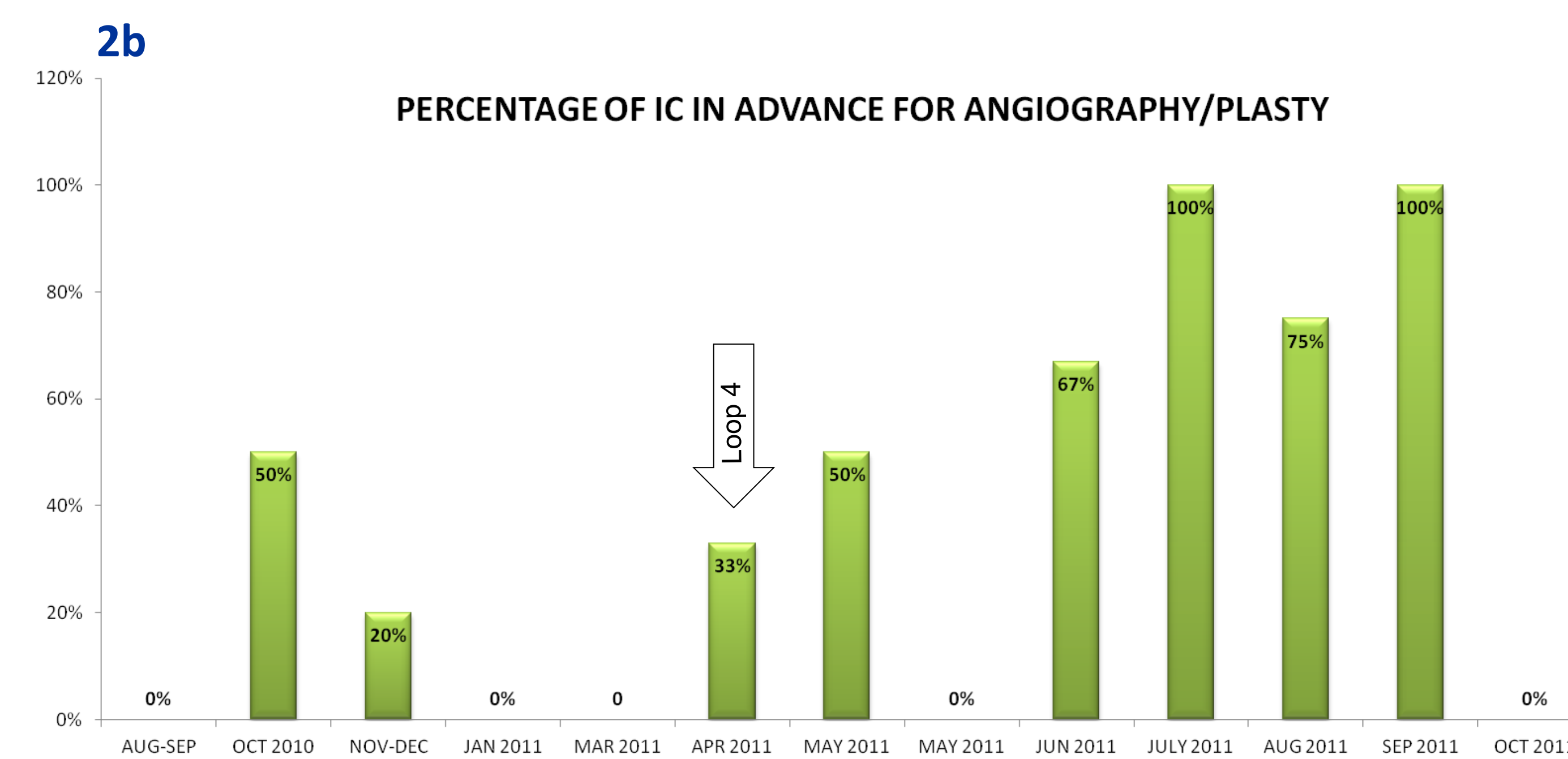
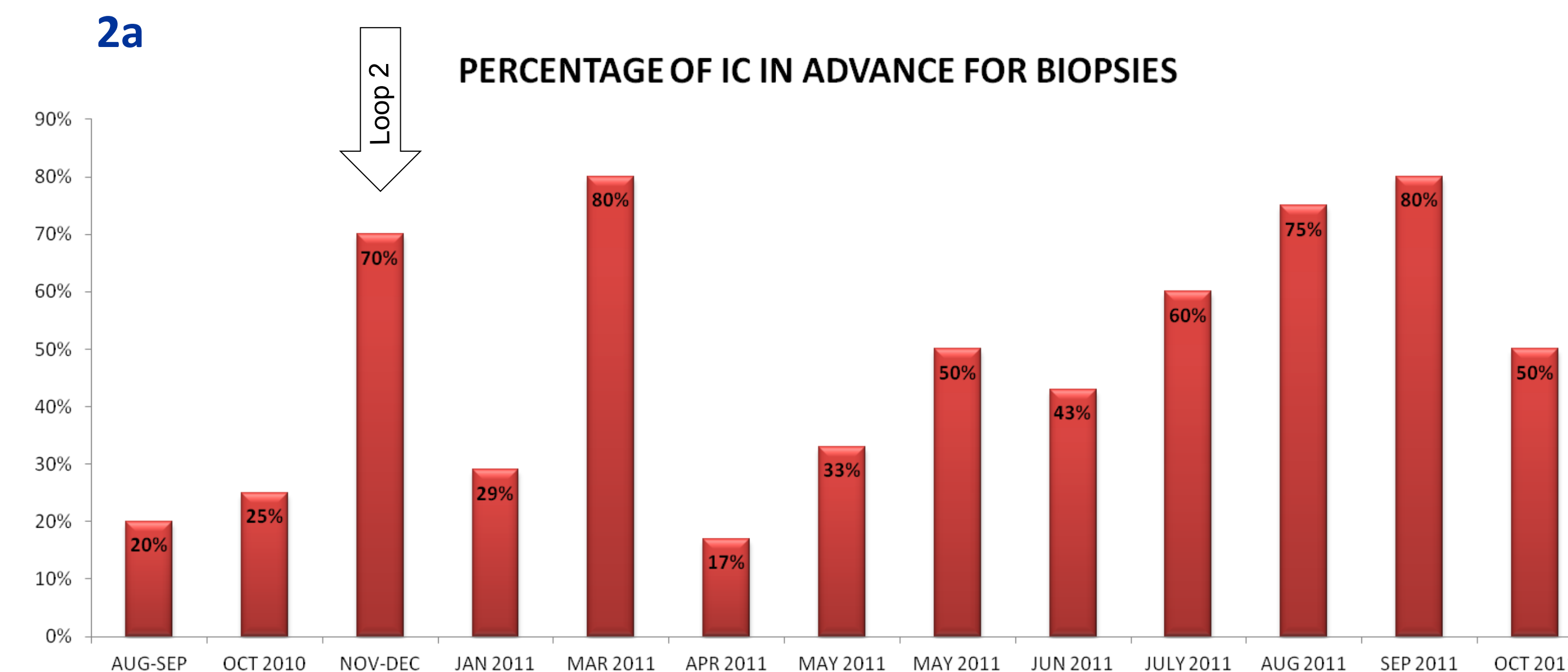
2. DESIGN

- Polled the IGT Team to ensure support for this QI initiative
- Held multidisciplinary meeting with key personnel:
 - IGT Clinic RN, Manager, Medical Director, IGT Pediatrician, IGT Radiologists etc.
- Brainstormed to decide strategies to increase the # of IC in advance
- Focused on specific elective cases associated with moderate risk & which entailed a lot of information
- Created new processes for specific referrals to these cases to the IGT Clinic
 - a) Biopsies
 - b) Angiography/Angioplasty/Embolization
 - c) G Tube insertions
- Planned a satisfaction survey of IGT Team and parents about IC in advance

3. EXECUTE:

- IDEA Loop 1. Oct '10:** Introduction of the plan to undertake this QI initiative on IC in advance
- IDEA Loop 2. Nov '10:** Encouraged IC in advance for elective biopsies (e.g. liver)
- IDEA Loop 3. Mar '11:** Further promotion of concept of IC in advance amongst IGT team – ongoing
- IDEA Loop 4. Apr '11:** New referrals for angiography to come to the IGT Clinic in advance of procedure
- IDEA Loop 5. May '11:** New referrals for G /GJ tube insertions to come to IGT Clinic
- IDEA Loop 6. Jul '11:** Worked with teams to integrate process with parental visit to G tube class
- IDEA Loops :** Ongoing with repeat re-evaluation

Fig 2a, 2b & 2c. Results of Evaluations pre and post interventions of targeted groups



Staff Survey:

IGT staff surveyed regarding their opinions of this Q.I initiative. Survey asked 4 questions, using 5 point Likert Scale: 1 disagree – 5 agree
Staff believe the following about IC in advance:

- Improved IGT efficiency (mean score 4.7);
- Helped parents make better decisions (mean score 4.6);
- Gave parents more time to ask questions (mean score 4.7);
- Promoting IC in advance was worthwhile (mean score 4.7)

4. ADJUST:

Ongoing IDEA loops in progress with cyclical adjustments.
Continued evaluation of processes for obtaining IC in advance, in terms of efficiencies, impact on list, impact on parents
New processes still to be developed for other types of elective cases (e.g. esophageal dilatations).
Reassess and perform further IDEA Loops after parental survey

Challenges & Solutions

- Form Compliance:** Documenting the time on consent form, increases accuracy of data collected
All forms were dated – several no time documented
- Staffing:** Insufficient staff in IGT assigned to consistently facilitate IC in advance
Re-address role of "consult person" to getting consents in advance
- Parents/Families:** Parents often not in house to give consent; IC over the telephone is not ideal
Translators frequently required
- Referring teams:** Many teams buy into broad clinical role of IGT and IGT Clinic
Resistance amongst some referral services to the concept of IGT Clinic visit
Need to highlight advantages for patient and referring team of IC in advance
- Patient Groups:** Repeat assessment of each **NEW current state**, to identify further patient groups
Develop new processes / further IDEA Loops
- Commitment:** Promoting "buy-in" and immediate advantages for IGT team regarding IC in advance
Compatibility of new processes with work flow
Ensure new processes are "Value added" steps
- Survey:** Perform family satisfaction survey regarding IC in advance
At design stage and awaiting REB approval

Future Steps

- Parental Satisfaction Survey
- Target new procedures
- Staff assignments to enable IC in advance

Conclusion

Given time, effort, and understanding of the inherent advantages for all concerned with IC in advance, the culture in IGT is already changing as we embrace this QI initiative

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