

Ask EuroSafe Imaging Tips & Tricks

IR Working Group

Checklist Modification Incorporating Radiation Safety

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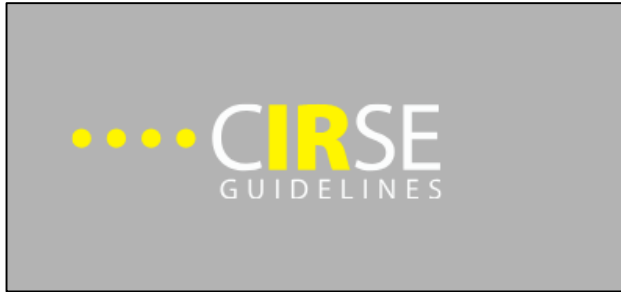
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- Checklists have been adopted and are performed in many interventional centers

Development

- RCR adapted the WHO surgical checklist in 2011
 - RADPASS safety checklist developed in Holland 2013
 - CIRSE 2012 - Generic European-wide
 - RCR issue (second edition) Guidance on implementing a checklist 2019
- **But**
Little or no emphasis on planned dose management

European Guidelines



IR Patient Safety Checklist

In line with the society's aim to improve patient safety in IR, CIRSE has created the first-ever safety checklist for the discipline, based on the WHO model. The checklist, which was created by an expert working group led by Michael Lee, was successfully tested in four hospitals across Europe before its launch in 2012.

The single-page document comprises pre-procedural ("Sign-in") and post-procedural ("Sign-out") components and can easily be modified to suit the requirements of individual hospitals. The document is available on the CIRSE website in both PDF and MS Word formats and will be published in CVIR soon along with a corresponding white paper.

All CIRSE members are encouraged to incorporate the checklist into their clinical practice to help improve the safety dynamics of their hospital.

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European Guidelines

Patient Name

Patient ID

Date of Birth / /

Male Female


Ward

Referring Physician

CIRSE IR Patient Safety Checklist*

Procedure

Date



Cardiovascular and Interventional Radiological Society of Europe

PROCEDURE PLANNING	YES	NO	N/A	SIGN IN	YES	NO	N/A	SIGN OUT	YES	NO	N/A
Discussed referring Physician/MDT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All team members introduced	<input type="checkbox"/>	<input type="checkbox"/>		Post-op Note Written	<input type="checkbox"/>	<input type="checkbox"/>	
Imaging Studies Reviewed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All Records with Patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vital signs normal during procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relevant Medical History	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Correct patient/side/site	<input type="checkbox"/>	<input type="checkbox"/>		Medication and CM Recorded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informed Consent	<input type="checkbox"/>	<input type="checkbox"/>		Patient Fasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lab Tests Ordered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CIN Prophylaxis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IV Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All Samples Labelled and Sent to Lab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specific Tools Present/Ordered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Monitoring Equipment Attached	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Procedure Results discussed with Patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fasting Order Given	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Coagulation screen/Lab Tests checked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Post-discharge instruction given	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relevant Lab Tests Ordered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Allergies and/or Prophylaxis Checked	<input type="checkbox"/>	<input type="checkbox"/>		Follow-up tests/imaging ordered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anaesthesiologist Necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Antibiotics/other drugs administered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Follow-up OPD appointment made	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anticoagulant Medication Stopped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Consent/Complications Discussed	<input type="checkbox"/>	<input type="checkbox"/>		Procedure results communicated to referrer	<input type="checkbox"/>	<input type="checkbox"/>	
Postinterventional (ICU) Bed Required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								
Contrast Allergy Prophylaxis Necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								

Name

Signature _____

Name

Signature _____

Name

Signature _____

* Modified from RADPASS & WHO SURGICAL CHECKLIST

- Radiation specific elements must be considered.
- Minor modifications to checklists can assist both

Patient & staff radiation safety / compliance

Sign In

SIGN IN	YES	NO	N/A
All team members introduced	<input type="checkbox"/>	<input type="checkbox"/>	
All Records with Patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct patient/side/site	<input type="checkbox"/>	<input type="checkbox"/>	
Patient Fasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IV Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring Equipment Attached	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coagulation screen/Lab Tests checked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allergies and/or Prophylaxis Checked	<input type="checkbox"/>	<input type="checkbox"/>	
Antibiotics/other drugs administered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consent/Complications Discussed	<input type="checkbox"/>	<input type="checkbox"/>	

Radiation Considerations

- **Equipment – functioning**
- **Pregnancy status**
- **Staff / Operator compliance**
- **Visitor guidance**

Equipment Safety

- **Is equipment functioning and safe to use?**
- Radiographers should assist the QA programme by conducting
 - Daily calibrations recommended by the manufacturer (if required)
 - Simple daily quality checks on the following:
 - Error messages
 - Noticeable imaging defects
 - Movements issues
 - Broken radiation warning lights / damaged signage

Record these errors &

Notify Medical Physics (where available) / Radiation Protection Officer /
the person in charge of radiation protection at your facility.

Patient Safety



- Optimise imaging technique (ALARA principle) by selecting **equipment programmes** according to patient factors (body habitus, disease & age)

Where applicable

- **Has the pregnancy status of the patient been established?**

In cases where the procedure is justified in pregnancy

- **Has the appropriate clinical re-justification / waiver been signed?**

Occupational Safety



- **Are all workers:**
 - **Utilising** appropriate **personal protective equipment?**
 - Lead aprons / glasses / shields
 - Correctly **wearing their Dosimeters?**

- Are only **essential workers** present for the **procedure / exposures?**

- **Where applicable, has appropriate guidance and instruction been given to:**
 - **Students?**
 - **Product representatives?**
 - **Other health professionals in attendance?**

Sign Out

SIGN OUT	YES	NO	N/A
Post-op Note Written	<input type="checkbox"/>	<input type="checkbox"/>	
Vital signs normal during procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medication and CM Recorded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lab Tests Ordered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All Samples Labelled and Sent to Lab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Procedure Results discussed with Patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-discharge instruction given	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Follow-up tests/imaging ordered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Follow-up OPD appointment made	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Procedure results communicated to referrer	<input type="checkbox"/>	<input type="checkbox"/>	

Radiation Considerations

- **Check** Patient Dose Record
PACS Transfer
- Have local **dose trigger levels** been exceeded?
 - **Follow-up procedure enacted?**
 - **Inform** Medical Physics / Radiation Protection Officer?

Summary

- Checklists play an important role in Patient safety
- Radiation Safety must be considered in procedure planning / checklists for both patients and staff
- Radiation protection in IR is a team exercise, where radiographers play a key role in its implementation
- All team members can assist in performing these simple checklist additions

Radiation Checks?

Equipment QA

Pregnancy Status
(Re-Justification)

Appropriate PPE

Dosimeter
Usage

Programme Selection

Visitor Guidance

Dose Record
Trigger Level & Follow-Up

REFERENCES

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