QuADRANT Workshop
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National Experience of Clinical Audit: The Luxembourg Experience

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➢ Internal and external clinical audits have to be carried out in all the establishments where medical radiological procedures take place

➢ External Clinical Audits are to be carried out under the request and with the instruction of the Ministry of Health

➢ A guide on clinical audit with examples was included in the legislation as an Annex
➢ Active Promotion of the documents published in 1996 and 2009
Transposition of BSS Directive 2013/59 Euratom into legislation in 2019

Internal Clinical audits:
- The establishment where medical radiological practices take place has to carry out our internal clinical audits at least once a year
- The subject and the objective of the clinical audit have to be documented as well as any actions for improvement put into place
- The procedure for internal clinical audit is defined in the legislation

External Clinical Audits:
- External clinical audits are carried out following the request and instruction of the Minister of health
- The establishment is obliged to provide all relevant information concerning the external clinical audit to the Minister
An up to date guide on the implementation of clinical audit was published on the Ministrys website in 2020 and distributed to all concerned establishments.

The guide apart from explaining clinical audit for medical radiological practices contains concrete examples of clinical audits as well as number of helpful references.
Example of a national Clinical Audit

➢ National Clinical Audit on the Adequate Completion of Radiology Request Forms in Luxembourg 2016

➢ External Clinical audit requested and instructed by the Ministry of Health

➢ Recipe N° 2
Purpose:

• Clinical background and the specific question to be answered need to be provided with the request for the radiological examination to be useful and appropriate
• Inadequate patient information can lead to mistakes in patient identification

The standard:

All request forms should contain the following information:

• The Clinical background
• The specific question to be answered
• Information concerning the identification of the patient
• Information concerning the referrer
• Information concerning the practitioner
Method

➢ **Indicator**: The percentage of request forms with adequate information

➢ **Collected data**: The presence or absence of the items in the standard for each request form

➢ **Additional information retrieved**: the identification of the radiology department, the type of specialty of the referrer, the type of imaging modality for the requested examination

➢ **Number of requests audited**: The audit was carried out on 200 requests forms per radiology department in all 10 radiology departments of the Luxembourg hospitals
Results for 1998 request forms

Percentage of presence of each item on the request forms. “Not applicable” means that a request does not concern a female patient with age between 15 and 55 years old.
Results

Percentage of presence on the request forms for the items “clinical background” and “the question to be answered”, for each radiology department. Each radiology department is identified by a letter. “2 items present” means both items are present.
Results

Percentage of presence on the request forms for the items “clinical background” and “question to be answered” according to the specialty of the referrer.
Results

Percentage of presence for the items “clinical background” and “question to be answered” according to the imaging modality. “other” includes mammography, dental imaging, and undetermined modality.
Results

➢ The two items essential for justification were present:

<table>
<thead>
<tr>
<th>Examined Item</th>
<th>% of requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical background</td>
<td>70 %</td>
</tr>
<tr>
<td>Clinical question to be answered</td>
<td>55 %</td>
</tr>
<tr>
<td>Both items were present</td>
<td>42 %</td>
</tr>
<tr>
<td>One of the items was present</td>
<td>39 %</td>
</tr>
<tr>
<td>No items for justification present</td>
<td>19 %</td>
</tr>
</tbody>
</table>
Conclusions

➢ Audit conducted without any constraint

➢ The percentage of conformity is not acceptable!

➢ Need to develop a new request form specific to medical imaging

➢ Need to develop an awareness campaign for referrers

➢ Easy access to previous examination needs to be made available

➢ Radiology departments and hospital management became aware of the results of the audit and the need to take actions to improve the situation

➢ Re-audit
Outcomes & challenges

➢ Internal Clinical audits are carried out but depend very much on the Department’s staff
➢ External clinical audits can be coordinated by an external body
➢ Communication between stakeholders is very important

➢ A body has been put into place since 2015 called medical imaging technical group which comprises of representatives of:
  ➢ the ministry of health,
  ➢ the social security,
  ➢ the professional societies
  ➢ the radiation protection competent authority

➢ The group works on implementing aspects of the new legislation on radiation protection in the hospitals one of which is clinical audit
➢ Clinical Audit is still work in progress
Heads of the European Radiological protection Competent Authorities - HERCA

Thank you