A MEDICAL DECISION SUPPORT TOOL FOR THE ORDERING OF IMAGING: A QUALITATIVE AND QUANTITATIVE STUDY AMONG RADIOLOGISTS IN FRANCE

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The radiologist’s role

**Validation of the examination request**

- Explain the results to the patient
- Pass them on to the requesting doctor

**Monitoring the examination protocol**

**Image analysis and report writing**

**Materials and methods**

**Results**

**Discussions**

**Conclusions**
GBU and ADERIM = Assistance with requests for radiology and medical imaging examinations

SFR-IM
Aide à la demande d’examens de radiologie et imagerie médicale (ADERIM)
Société Française de Radiologie et d'Imagerie Médicale

Référentiel des bonnes pratiques à l'usage des médecins
Purpose of the study

Evaluate the website through focus group interviews

Develop a questionnaire based on opinions gathered during interviews

Harmonise prescription practices

Obtain opinion consensus from radiologists to optimize and promote use
Materials and methods

- Preliminary qualitative study using focus groups and SWOT analysis
- Drawing up a questionnaire
  - indications and use
  - ergonomics
  - medical content
  - organisational content
  - visibility

- Data collection: LimeSurvey®
- Sample: radiologists et residents
- Contact by e-mail with reminders
Strengths
- Ergonomics: 3 search tabs, quick and easy to use
- Easy access
- Comprehensive list of indications
- Specific choice of contrast medium and degree of urgency
- Clarify the pathology to be investigated
- Differentiating children from adults
- Common exchange base
- Justification for the examination
- Reassurance and learning support
- Reduce unnecessary examinations and costs
- References to subspecialty experts and specialized literature

Weaknesses
- Ergonomics: "reason for consultation" incomplete, inaccurate classification
- Complexity of use
- Heterogeneity of the target population and explanations
- Lack of representation of prevalence in general practice
- Imprecision of the degree of urgency and second intention
- Limited use in daily practice
- Questioning external validity
- Lack of clinical information
- Lack of awareness and promotion of the tool
- Limits direct exchanges between healthcare professionals
- Inconsistencies

Opportunities
- Optimise ergonomics
- Facilitate access and improve ease of use
- Take into account the target population for all items
- Take into account prevalence in general practice
- Improve the accuracy of items: degree of urgency, 2nd intention
- Take part in continuing education
- Strengthen external validity
- Improve knowledge and dissemination of the website

Threats
- Limited consultation time
- Difficulty in changing daily habits
- Loss of profitability
- Heterogeneous accessibility across health regions
- Poor credibility of the "GBU"
QUESTIONNAIRE RESULTS

Mailed radiologists and residents
N = 800

Questionnaires completed
N = 230

Incomplete answers
N = 87

Complete answers
N = 143

Visibility
- Just over a quarter of respondents heard of the new website
- 96.5% would use it again
- 92% were familiar with the old version
- If the new version were available as a smartphone application 88% would use it
- Only over 50% of respondents found the name of the website appropriate
### Use
- As a personal reassurance tool: 90% of respondents
- For examinations outside their field of specialization: over 95%
- To justify or limit the prescription of an examination to a patient: almost 87%
- ... with physicians: over 90%

### Medical content
- Missing reasons for consultation: over a third agreed
- Specification of examinations requiring a specialized prescription: over 70% in favour
- Links to the recommendations or references used: around 90% in favour
- Degree of urgency with a precise deadline given: over 85% in favour

### Ergonomics
- Site at least fairly comprehensive in terms of the imaging indications presented: almost ¾ agreed
- Intuitive presentation of the degree of emergency: almost 80%
- In favor of a "clinical signs" section: 70%
- Items missing from the "Motifs de consultation" section: almost 2 out of 5 respondents

### Organizational content
- Systematically recommended second-line examination: over 3/4 in favour
- Recent / up-to-date recommendations on the website: over 90% in favour
- Explanatory iconographies and figures for certain pathologies: respectively some 69% and over 80% in favour
### Discussion of results

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<th>Ergonomics</th>
<th>Website name</th>
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<td>Optimization</td>
<td>« Clinical signs » tabs »</td>
<td>Radioclic</td>
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<tr>
<td>Distribution</td>
<td>Improve the « reasons for consultation » tabs</td>
<td>« Quelle Imagerie », « Aideradio » or « Radiodiag » …</td>
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<td>Precise deadline for the degree of emergency</td>
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ADERIM

Guide promotion

« Radioclic »

Standardization of practices

Available to all general practitioners

Multi-disciplinary collaboration and healthcare networks