



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

J Spriet (1) ; T Musset (1); R Hanafi (1) ; L Hacein-Bey (2) ; J Pruvo (1)

(1): Neuroradiology department, Lille University Hospital

(2) : Neuroradiology, Radiology Department, University of California Davis School of Medicine,
Sacramento, CA

Introduction

Materials and methods

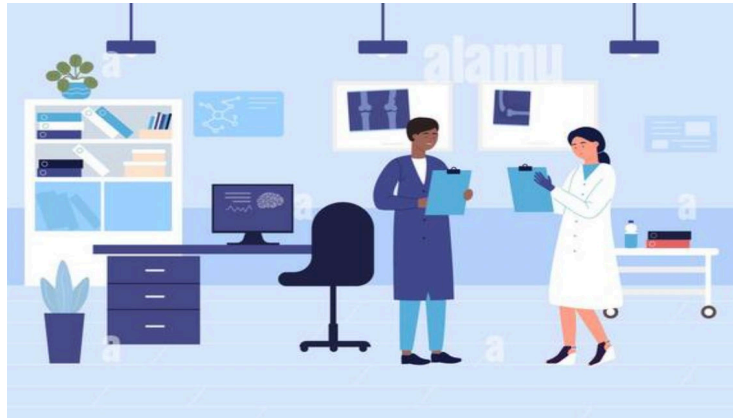
Results

Discussions

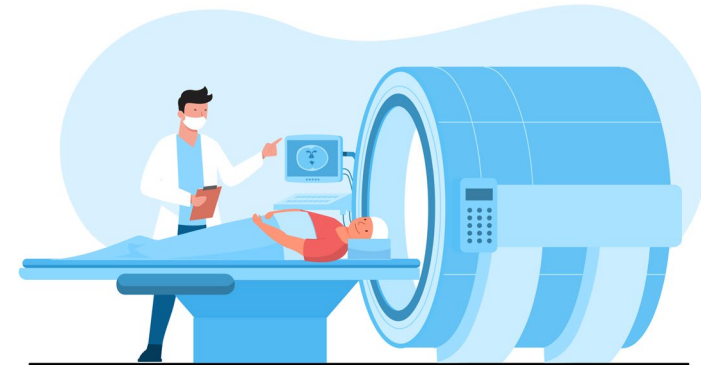
Conclusions

The radiologist's role

Validation of the examination request



Monitoring the examination protocol



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



Image analysis and report writing



Introduction

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

Motif de consultation



OU

Pathologie



OU

Par mot-clé



Vous avez une remarque ?



Introduction

Materials and
methods

Results

Discussions

Conclusions

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

Introduction

Materials and
methods

Results

Discussions

Conclusions

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



Introduction

Materials and
methods

Results

Discussions

Conclusions

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"

Introduction

Material et
methods

Results

Discussions

Conclusions

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

Introduction

Materials and
methods

Results

Discussions

Conclusions

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 %

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

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

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

Introduction

Materials and
methods

Results

Discussions

Conclusions

Discussion of results

Indications and use of ADERIM

Optimization

Distribution

Precise deadline for the
degree of emergency

Medical content

Specialized prescription

Bibliography and references

Links for recommendations

Ergonomics



« Clinical signs » tabs »

Improve the « reasons
for consultation » tabs

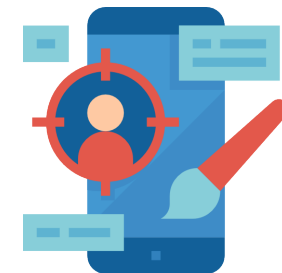
Organisational content

Exam costs

News

Fact sheets and
explanatory videos

Website name



Radioclic

« Quelle Imagerie », « Aideradio »
or « Radiodiag » ...

Visibility

Website promotions

Smartphone application

Introduction

Materials and
methods

Results

Discussions

Conclusions

ADERIM



Guide promotion

« Radioclic »



**Standardization of
practices**

**Available to all
general practitioners**



**Multi-disciplinary
collaboration and healthcare
networks**

