Fédération Nationale DES CENTRES DE LUTTE CONTRE LE CANCER

Standards, Options & Recommandations

Effectiveness of CPGs in everyday practice

A critical review

Pr. I. Durand-Zaleski - Dr. B. Fervers

Effectiveness of CPGs: Identification of barriers and facilitators

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Standards, Options & Recommandations

A. Caracteristics of CPGs

B. Implementation strategies

C. Cultural and organisational context

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Standards, Options & Recommandations

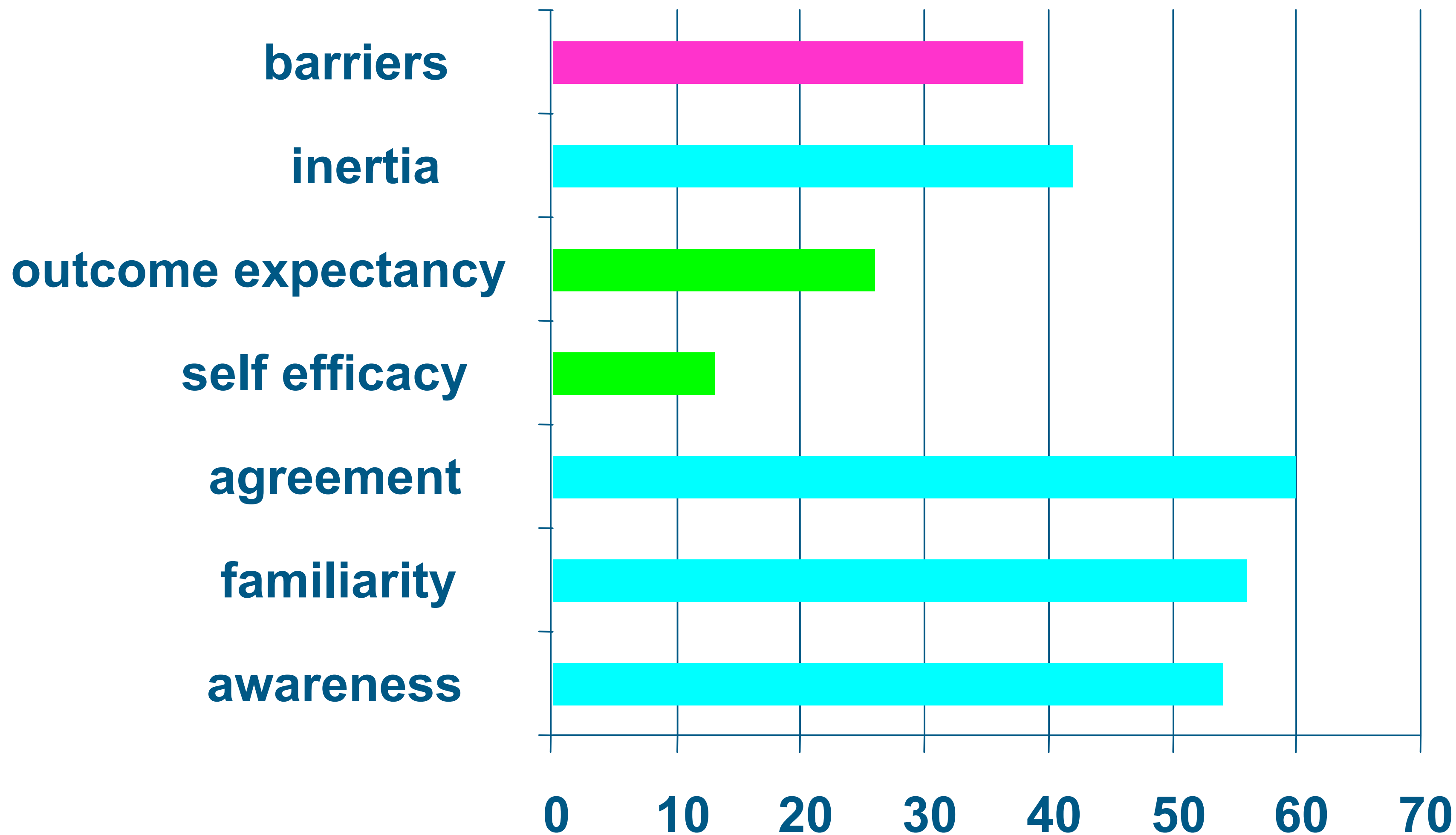
Why don't physicians follow clinical practice guidelines?

(Cabana & al. JAMA 1999)

- **Ignore guidelines exist (awareness)**
- **Ignore the content of the guideline (familiarity)**
- **Disagree with either the general concept or the content of one specific guideline (agreement)**
- **Cannot perform as requested by the guideline (self-efficacy)**
- **Following guidelines will not result in the desired outcome (outcome expectancy)**
- **Inertia**
- **External barriers: availability, organisation and costs**

Why don't physicians follow clinical practice guidelines?

(Cabana & al. JAMA 1999)



Why general practitioners and consultants change their clinical practice: a critical incident study

Allery L et al. BMJ 1997;314:870-4

- Leaning curve and increased awareness of the disease management
- Contact with other professionals
- Economic
- Education
- Medico-legal
- Organisation (shortage of manpower)
- Patient-centered (take patient ’s preferences into consideration)
- Pharmaceutical companies
- Technical progess

Barriers and facilitators:
A. Caracteristics of CPGs

1. Organisatation in charge of CPG development
2. Involvement of CPG users
3. Quality of the CPG
4. Guideline ‘aftercare’

1. Organisatation in charge of the development

- Level of development: local, regional, national

- Bottom-up as opposed to top-down

- Structured program vs ad hoc approach

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Case study : SOR-FNCLCC

(Fervers B, et al. BJC 2001)

- **Federation of the 20 comprehensive Cancer Centers**
- **Professional initiative**
- **Structured program**
- **Permanent methods resource group**
- **Formal collaborations with the** Federation of French Public University and general hospitals and learned societies
- **Culture of the cancer system**

Case study :

Legitimacy of the organisation: Regulatory Medical references (RMO)

- Regulatory medical references were developed by an "independent" Agency (financed by the government and the social security)
- Enforced by a "regulatory" procedure
- By agreement between physicians’ unions and the French Social Security (public health insurance)

Case study : Regulatory Medical references (RMO)

- When physicians do not follow the references, they can be sued for a fine up to Euro 3,000
- Limits of the procedure include:
  - the lack of outcome assessment,
  - possible shifts from out to in-patient expenditures,
  - difficulty and costs of controls

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Case study : Regulatory Medical references (RMO)

Example

- Prescription of NSAIDs: "*it is useless and potentially dangerous to prescribe simultaneously two systemic NSAIDs (aspirin excluded)*"
- For 3-4 violations in a two-month period, Euro 700
- Maximum liability Euro 2,500 for 6 violations

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Case study :

Regulatory Medical references

Violations

- Assessed by the review of all prescriptions during a two-month period
- Out of a total number of 13,000 (roughly 10 percent of the physicians’ population), 186 were eventually sued
- 75 were eventually found guilty
- Sentence was cancelled by the supreme court

2. Involvement of practitioners

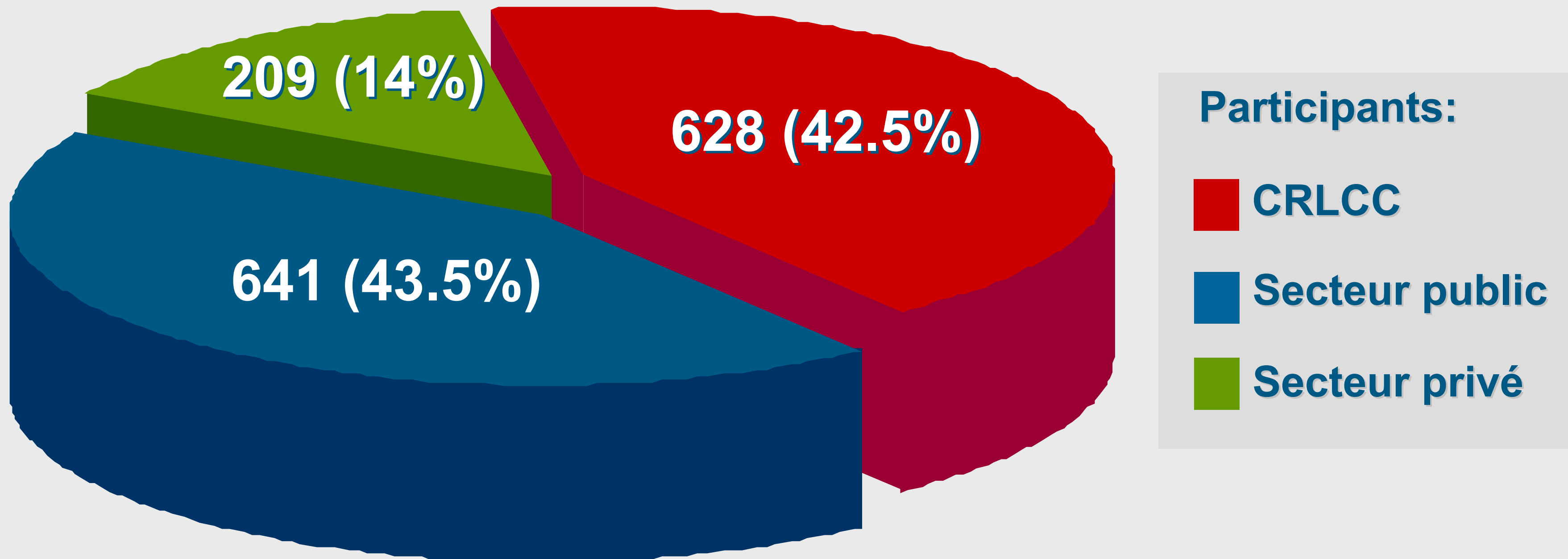
- **Benefices of stakeholder and user involvement:**
  - increase of local relevance
  - increase of awareness
  - acceptance of CPGs
  - improvement of critical appraisal skills
  - valorisation by scientific publications

Case study : Standards, Options & Recommendations (SOR)

- **Working groups**
  - Stakeholder, opinion leader, user
  - Multidisciplinary:
    - **specialities involved in the management of a given tumour site or a specific topic**
    - **representatives from the regional cancer centres, the university hospitals, general public hospitals, private clinics and learned societies**
- **Methodologist, professional information scientists**

Case study :
Involvement of practitioners in SOR

Nombre total de participants*: 1478



* 1998

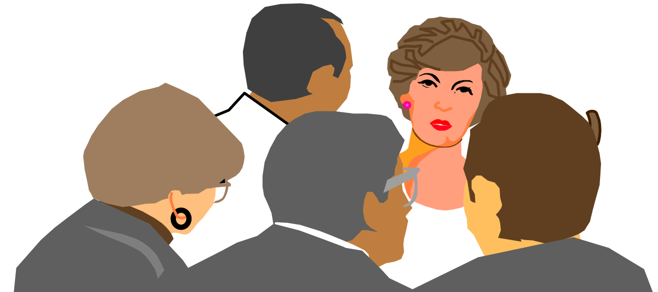
Case study :

SOR: Individual benefice of participation

- **Cancer specialists participating in SOR working groups:**

  (individual interviews with practitioners of 8 CRLCC, 2000)

  - **Continuing education**
  - **Multidisciplinary discussion with colleagues**
  - **Collaboration of institutions involved in cancer care**
  - **Scientific publications**



3. Quality of the CPG: AGREE

- **Generic instrument for assessing and comparing the quality of CPGs**
- **23 key items organised in six domains corresponding the different dimensions of guideline quality**
  - Domain 1 : Scope and Purpose
  - Domain 2 : Stakeholder Involvement
  - Domain 3 : Rigour of Development
  - Domain 4 : Clarity and Presentation
  - Domain 5 : Applicability
  - Domain 6 : Editorial Independence

3. Quality of the CPGs

Standards, Options & Recommandations

- Controversy on the quality of guidelines produced by medical societies
- Concerns mostly the quality of **reporting**
- Grilli R &al. Practice guidelines developed by specialty societies: the need for a critical appraisal. Lancet. 2000;355:103-6.
- Shaneyfelt T & al. Are guidelines following guidelines? The methodological quality of clinical practice guidelines in the peer-reviewed medical literature. JAMA. 1999;281:1900-5.
- Identification of evidence, involvement of stakeholders, interpretation, reporting

Case study :

Consequences in terms of liability in the French legal context

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Standards, Options & Recommandations

- Literature search and 9 experts specialised in Health law and ethics
- Quality of guidelines is important in terms of liability:
  - serious
  - accurate
  - reliable
  - complete
  - up-to-date
  - secure
- Up-to-date procedures are needed to guarantee up-to-date guidelines

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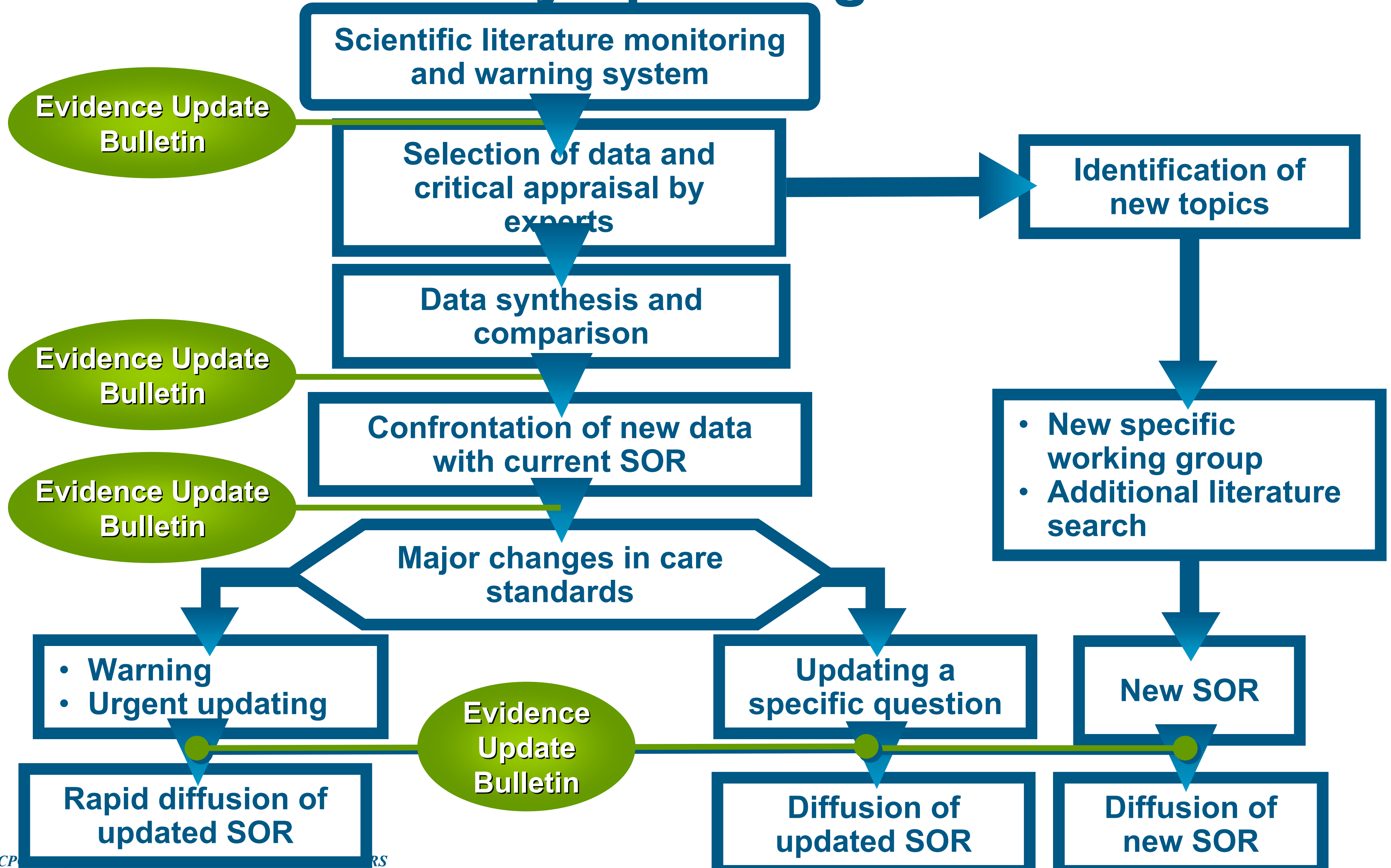
Case study : Consequences in terms of liability in the French legal context

- **SOR guidelines can be considered as the state of the art in oncology at time of release**
- **Clinicians who use the SOR will avoid problems of liability. However:**
  - evidence and the state of the art may evolve over time
  - clinicians are responsible for their medical decision
- **Clinicians who do not use the SOR may appear responsible for disasters, except if they can assert their medical decision:**
  - evolution of scientific knowledge
  - specific clinical circumstances, etc

Case study :
Identification of new evidence for the timely up-dating of SOR



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Case study : Clarity of reporting

- **Example of a vague recommendation:**
  - "Antibiotics are indicated for cases with an abnormal or complicated course"
- **Example of a specific recommendation**
  - "Antibiotics have to be prescribed in children of two years or older with acute otitis media if the complaints last longer than three days or if the complaints increase after the consultation despite adequate treatment with painkillers; in these cases amoxycillin should be given for 7 days (supplied with a dosage scheme)"

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Case study : Presentation of SOR

- Supported with clinical algorithms

Standards, Options et Recommandations pour les cancers du sein non métastatiques

Tumeur opérable d'emblée - Traitement locorégional (Fin) 478

Localisation de la tumeur ?

Tumeur centrale et/ou interne

Standards :
- Radiothérapie de la chaîne mammaire interne

Options :
- Radiothérapie sus- et sous-claviculaire
- Pas de radiothérapie ganglionnaire pour des lésions supposées à faible risque (évaluation en cours)

Indications d'un traitement adjuvant

Tumeur externe

Standards :
- Pas de radiothérapie des aires ganglionnaires

Indications d'un traitement adjuvant

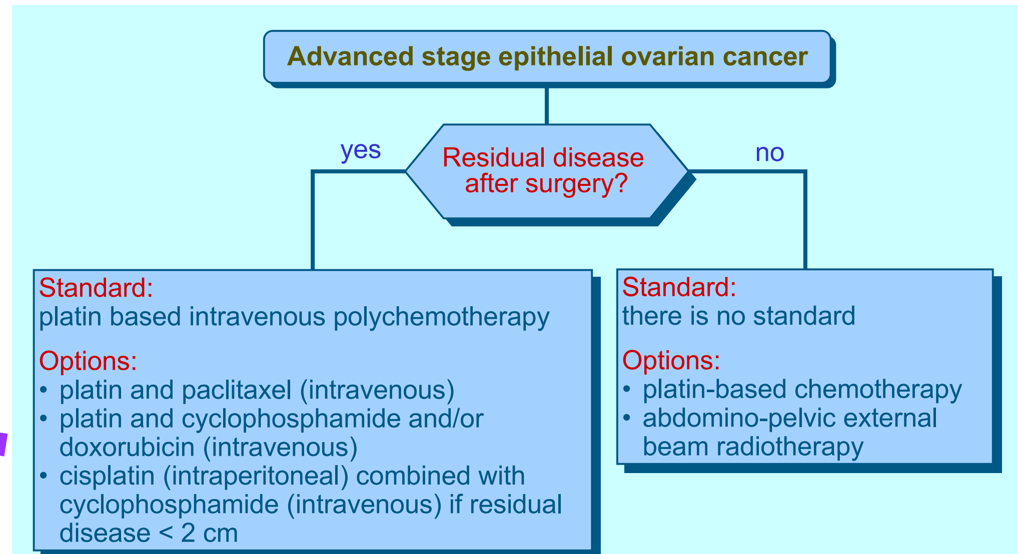
MOTS CLEFS INDEX IMPRIMER QUITTER

© FNCLCC 1998

Case study: Presentation of SOR

Standards, Options & Recommendations

- **Electronic version to take into account complexity of the information**



Standards, Options & Recommendations

Combination chemotherapy containing a platin given intravenously is **standard treatment** for advanced disease (stages IIB, IIC, III) with residual disease after surgery. The addition of a platin to a combination without platin increases overall survival (level of evidence A)……….

The randomized trials having evaluated paclitaxel in combination as first line therapy are shown in table 10. The GOG study **[MCGUIRE1996]** compared the combination of paclitaxel (135 mg/m2 given as an infusion over 24 hours)-cisplatin, with cyclophosphamide-cisplatin……...

Reference	Treatment	N	Patient 's caracteristics	Median relapse free survival (p)	Median survival (p)	Median follow up
[MCGUIRE 1996]	CDDP+cyclo. vs CDDP+paclit.	202 vs 184	Stage III residual disease > 1 cm stage IV	13 month vs 18 month (0,001)	24 month vs 38 month (0,001)	37 month

Référence [MCGUIRE1996]. Mc Guire WP, Hoskins WJ, Brady MF, Kucera PR, Partridge EE, Look KY, Clarke-Pearson DL, Davidson M. Cyclophosphamide and cisplatin compared with paclitaxel and cisplatin in patients with stage III and stage IV ovarian cancer [see comments]. N Engl J Med 1996;334(1):1-6

3. Quality of the CPG: Complexity of the guideline report

- The guideline must provide a practical algorithm for a given patient
- Some guidelines indicate the management of benign prostate adenoma without telling the GP how to ascertain the absence of malignancy
- Test the guideline with clinicians (e.g. sample of records)

4. Caracteristics of CPGs: Guideline 'aftercare'
(G.Browman, BJC 2001)

- **Guideline aftercare phases:**
  - dissemination
  - implementation
  - evaluation
  - updating
- **To enhance effective use, CPG development should address the issues of guideline 'aftercare'**

Barriers and facilitators:
B. Implementation strategies
(Durieux 1998; Davis JAMA 1995; Oxman CMAJ 1995)

Dissemination of CPGs is insufficient to lead to changes in clinical practice

- Information and Education, including CME
- Educational outreach
- Opinion leaders
- Organisational interventions - associate organisational change
- Audit and feedback
- Monitoring and failure mode effect analysis
- Data on patient outcome

Case study: Awareness and use of SOR in the CRLCC

(Fervers B. BJC 2001)

- **Methods**
  - survey by questionnaire
  - random sample of 3 practitioners from each CRCC (1 surgeon, 1 oncologist and 1 radiotherapist)
  - questionnaire administered by phone

Case study: Awareness and use of SOR

Standards, Options & Recommandations

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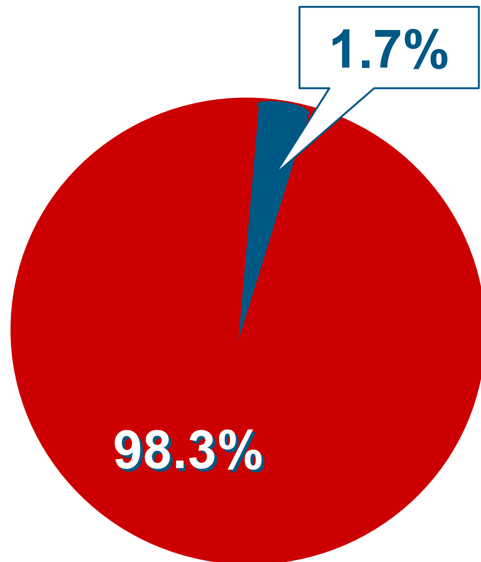
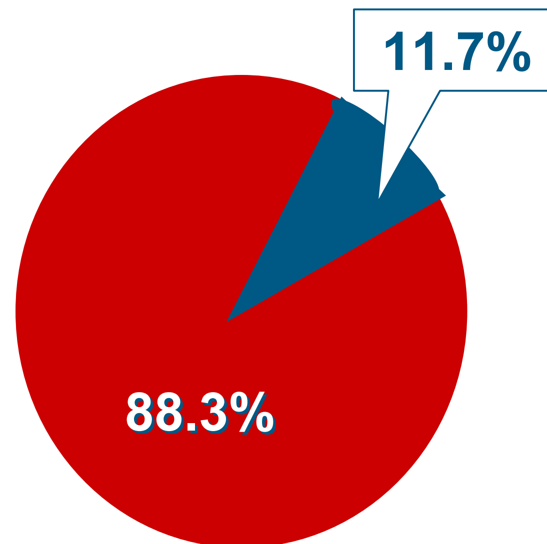
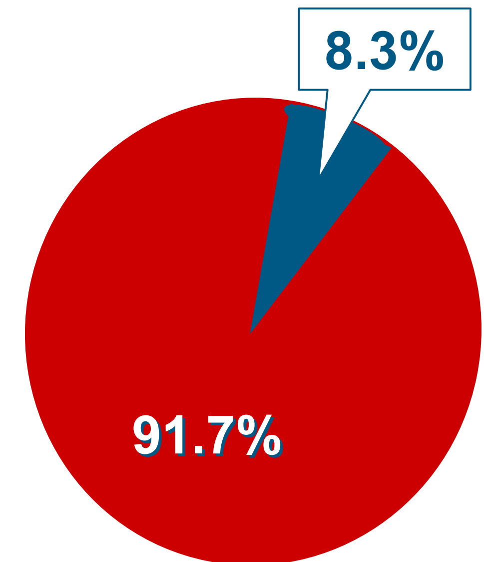


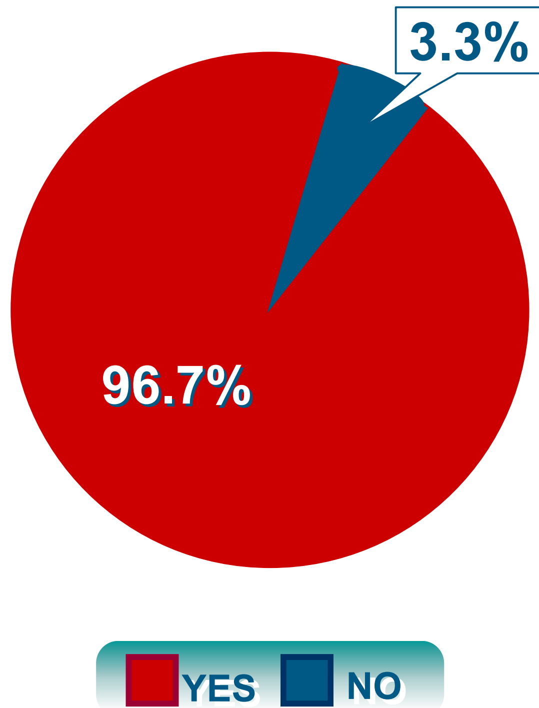




* 100% = 60 practitioners

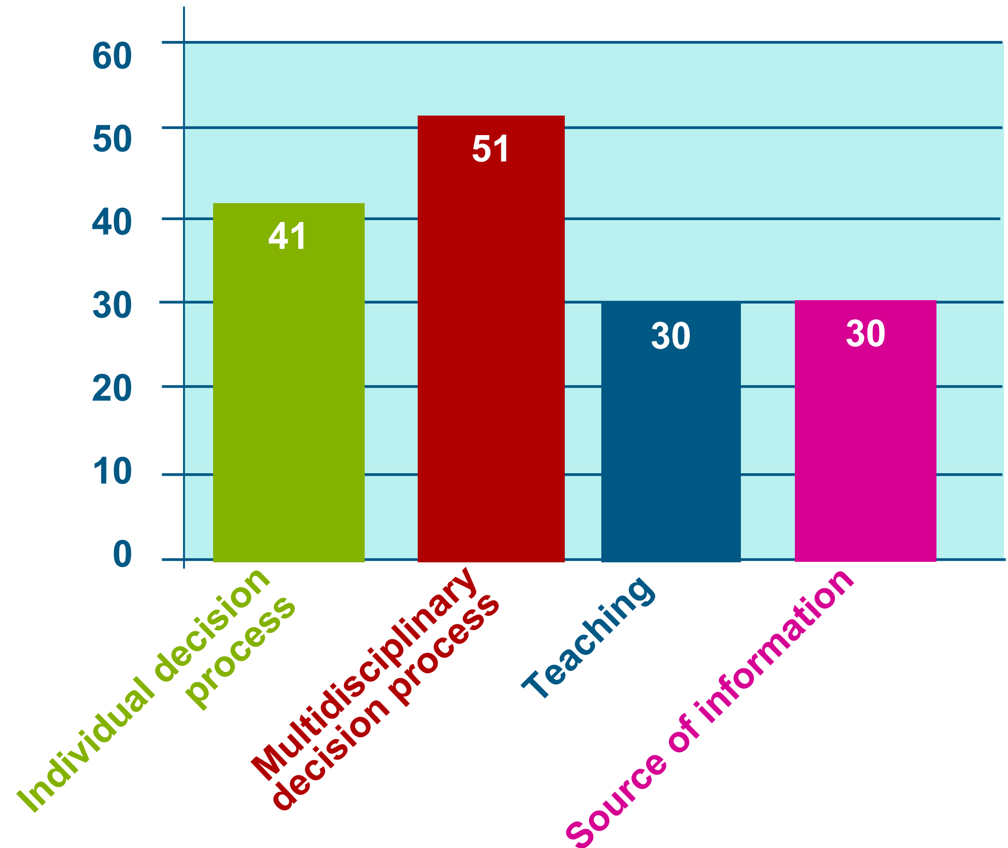
Case study: Awareness and use of SOR

Do you use the SORs in practice*?



* 100% = 60 practitioners

How the SORs are used



Standards, Options & Recommandations

Case study: Implementation of CPGs in a regional cancer network

(I. Ray-Coquard et al. BJC 2001 86:313-321)

- Regional cancer network of 25 public or private general hospitals
- Monthly meetings on specific cancer site were organized.
- The CPGs were discussed, modified and/or validated by all the physicians to obtain a **regional consensus**
- 15 days after, validated CPGs were sent to all participating physicians
- No penalty or reward system was included

Réseau Rhône-Alpes en Oncologie ONCORA

Breast Cancer algorithm example

Standards, Options & Recommendations

Microsoft PowerPoint - [Sein]

Fichier Edition Affichage Insertion Format Outils Diaporama Fenêtre ?

Version 8 - validée par ONCORA SEIN GYNECO le 18/11/99

CANCER DU SEIN

6 / sein.ppt

RESEAU ONCORA ONCOLOGIE

Décision à partir des résultats cytologiques ou histologiques *

Groupe 0* matériel insuffisant (cyto), ou artefact (cyto ou histo)

Groupes 1 et 2* 1 = bénin simple 2 = bénin complexe

Groupes 3 et 4* 3 = doute 4 = suspicion de malignité

Groupe 5* malin

Concordance avec l'image mammo* ?

non

oui

Bénin fiable*

non

oui

Non informatif

Prélèvement à refaire ou chirurgie d'emblée ou surveillance

Retour au dépistage

Risque de malignité

Biopsie ou Exérèse à visée diagnostique et thérapeutique

Malin

Exérèse à visée thérapeutique

* Selon les recommandations de

Dessin Formes automatiques

Diapositive 6 sur 27 Thesadul

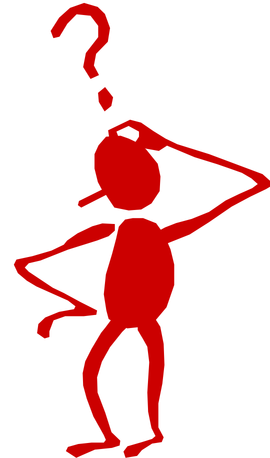
Démarrer WinPopup Microsoft PowerPoint... 09:21

Case study:
Impact of CPGs in a regional cancer network

- The observed compliance rate with the CPGs for the 844 assessable overall treatment sequences (breast and colon cancer) was significantly higher in 1996 than in 1994 ($p<0.001$)
- No difference in the observed compliance rate with CPGs in the control group
- Results were similar to those reported for the Centre Léon Bérard (JAMA 1997,278:1591-1595)
- Initial conformity rates in 1994 were lower, but the increase was of the same size
- Cancer network may be more effective in changing medical practice than CPGs diffusion by external experts without implementation strategy

Case study: Implementation of 'reminders' 1

- **Tumor makers and thyroid markers** (Durand-Zaleski I, Rymer JC, Roudot-Thoraval, Revuz J, Rosa J. Reducing unnecessary laboratory use with a new test request form. Lancet 1993;342:150-3)



- **Format a new test request form to prevent invalid prescriptions**
- **Assess effect on overall prescriptions and practice patterns**
- **Initially successful**
- **Then orders returned to anarchy**

Case study:
Implementation of ‘reminders’ 2

- Why? Organisational issues
  - because the prescriptions are are not written by physicians
  - because departments have formatted their own blood work forms to save time
  - deadlock between nurses in the administration and nurses in the wards

Case study:
Implementation of ‘reminders’ 3

- **Scientific & personal issues**
  - **no consensus on the most appropriate thyroid test**
  - **fear of staff reduction in the nuclear medicine department**

C. Barriers and facilitators: Cultural and organisational context

- Financial incentives
- Organisationnal barriers
- Patients' expectations

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Case study:

Effect of financial incentives on breast cancer treatment

- The choice and mode of administration of chemotherapy for breast cancer is influenced (independently) by the hospital 's ownership
- Publicly-funded hospitals use cheaper molecules, higher daily doses & fewer hospital days
- Private-for-profit hospital do the opposite
- These choices do not affect final outcome but QOL

(Tonnaire G, Paraponaris A, Moatti J-P, Chanut C, Sambuc R. Hétérogénéïté des pratiques médicales et régimes de tarifcation du susytème de santé. Econmie publique 1982;2:87-114)

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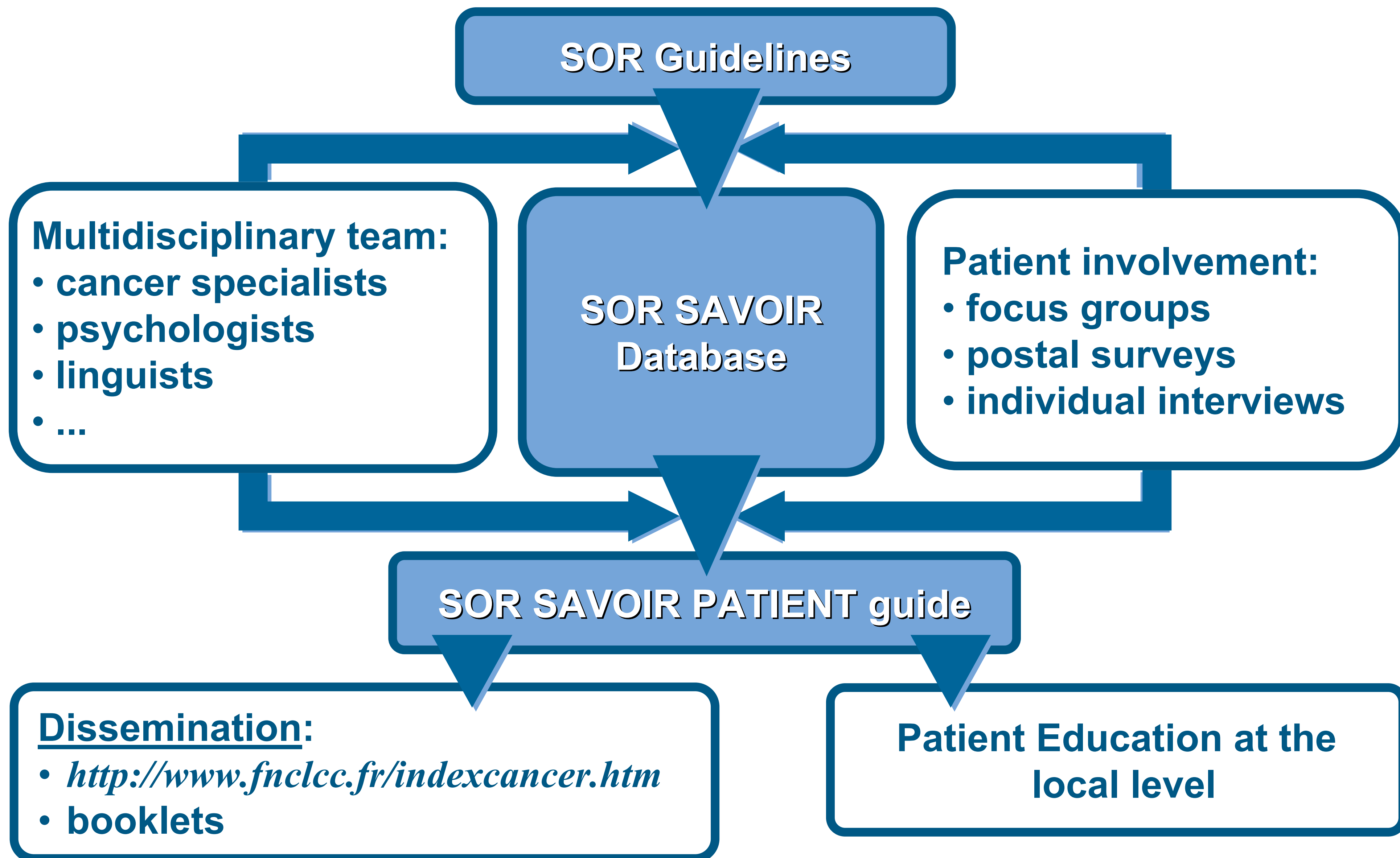
Cultural and organisational context: Patients ’ expectations

- Patients ’ preferences
- Lack of information
- Different information sources
- Different values
  - ➔ Patient guidelines
  - ➔ Involvement of patients in CPGs development

Case study : SOR SAVOIR PATIENTS- FNCLCC



Case study :
SOR SAVOIR PATIENTS-Objectives

- Improve the quality of cancer care
- Facilitate doctor patient communication on disease and treatment
- Favour understanding of cancer and its treatment by the patient
- Favour active patient’s involvement in the clinical decision

Conclusion

- To enhance their acceptance and use, CPG have to be flexibles:
  - Evolution of scientific evidence
  - Evolution of the organisation of health care delivery
  - Evolution of patients' expectations
    - outcomes
    - involvement in medical decisions
- Complementarity of EBM and Patient centered approaches to improve health care quality