DIFFICULTIES AND OBSTACLES IN GUIDELINES IMPLEMENTATION

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Outline

- 1. Variations of medical practices
- 2. Clinical practices guidelines (CPGs)
- 3. Obstacles to the implementation of CPGs
- 4. Implementation strategies



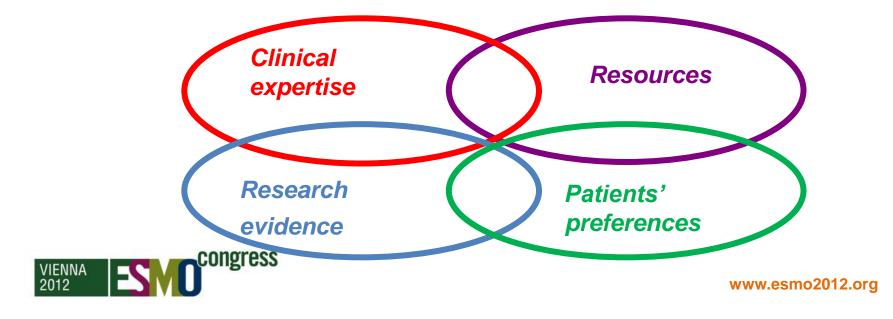
1. Variations of medical practices

- \rightarrow well known and published since 1938 :
- Geographic variations (countries, regions)
- Clinical variations
- Variations linked to the structures which take care of the patients
- Variations linked to the epidemiological data



1. Variations of medical practices

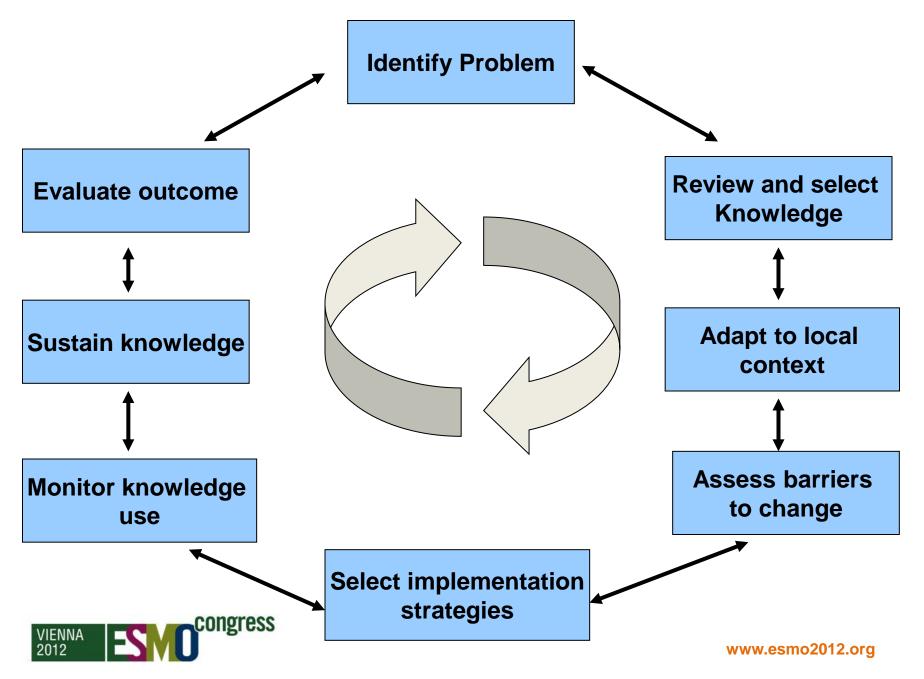
- These variations seem to be correlated to
 - the organization and the volume of medical care,
 - the dissemination of medical knowledge,
 - and to the medical consensus.



2. Clinical practice guidelines (CPG)

- Assist physicians in appropriate clinical decision making
- Improve quality of healthcare and outcome for patients
- Influence national policies for efficient allocation of resources





3. Assessing the context and determining barriers to change

- <u>Patients</u>
- <u>Clinical decision makers</u> : individual practitioners caring for patients, and groups developing clinical guidelines
- <u>Legislative decision makers</u>: politicians, bureaucrats, engaged in developing public policy
- Administrative decision makers : managers, board members
- Pharmaceutical decision makers



3. Factors influencing the implementation of CPGs

- <u>Characteristics of CPGs</u>: easy to understand, clear, etc.
- <u>Characteristics of physicians</u>: awareness of the existence of guidelines
- <u>Characteristics of patients</u>: comorbidity, etc.
- <u>Characteristics of the environment</u>: lack of tools , insufficient staff, local opinion leaders



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Heffner JE. Chest 2000;118:70-73

3. Factors influencing the implementation of CPGs

<u>Characteristics of CPGs</u>

- Evidence based, useful, easy to use, compatible

- Adapt to local contexts
- Be linked to effective evaluation plans



Adapt CPGs to local context

- <u>Design</u>: management and outcomes of women with early invasive breast cancer treated in rural and metropolitan centres, in metropolitan Canberra (Australia).
- <u>Setting</u>: 2,081 women with early breast cancer who underwent potentially curative surgery between 1997 and 2006
- <u>Results</u>: women treated in rural centres were less likely to receive postoperative radiotherapy after breast-conserving surgery, or to undergo sentinel lymph node biopsy



3. Factors influencing the implementation of CPGs

- <u>Physicians / Potential adopters</u>
 - Awareness
 - Attitudes/intention
 - Skills/knowledge
 - Involvement



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Cabana MD, JAMA 1999, 282:1458-1465.

Physician involvement in the CPGs development

Impact of CPG for Breast & Colon Cancer in a French Cancer Center

	Breast cancer (% compliance)			
	1993	1995	р	
Initial stage	75	86	0,09	
Surgery	96	92	0,26	
Chemotherapy	71	85	0,01	
Radiotherapy	72	93	0,001	
Hormonal therapy	83	94	0,01	
Follow up	31	80	0,001	
Overall treatment sequence	19	54	0,001	

Colon cancer (% compliance)			
1993	1995	р	
100	100	-	
100	99	0,56	
56	78	0,02	
62	54	0,69	
50	70	0,009	
	100 100 56 62	1993 1995 100 100 100 99 56 78 62 54 50 70	

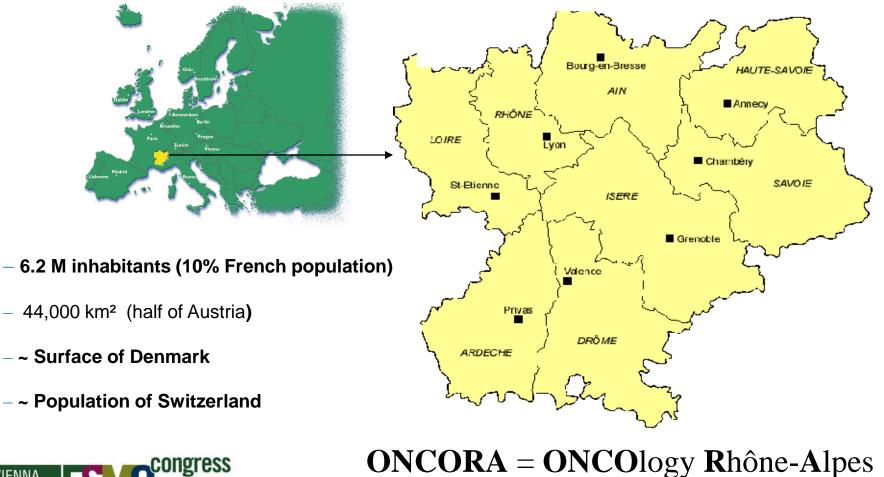
Ray Coquard I. JAMA. 1997;278:1591-1595

3. Factors influencing the implementation of CPGs

- <u>Practice environment</u>
 - Structural factors: network, decision making, rules or laws, available technology, etc.
 - Social factors: culture and belief systems, leadership, politics, peer influence
 - Economic considerations: resources, renumeration, funding systems



THE RHONE-ALPES REGION IN FRANCE





Results – Breast Cancer

Compliance rates with the CPGs for medical decisions by type of procedure.

	ONCORA Group (% compliance)			Control Group (% compliance)		
	1996	1999	р	1996	1999	р
Initial stage	86	83	0,26	58	52	0,3
Surgery	93	70	0,001	84	68	0,001
Chemotherapy	79	81	0,6	69	60	0,07
Radiotherapy	81	85	0,1	50	78	0,001
Hormonal therapy	82	93	0,001	74	89	0,001
Follow up	81	85	0,9	13	14	0,64
Overall treatment sequence	40	36	0,25	7	4	0,19



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Ray-Coquard I. J Clin Oncol.2005; 23:4414-4423.

Results – Colon cancer

Compliance rates with the CPGs for medical decision by type of procedure.

	ONCORA Group (% compliance)			Control Group (% compliance)		
	1996	1999	р	1996	1999	р
Initial stage	100	88	0,003	67	70	0,44
Surgery	100	96	0,02	98	87	0,001
Chemotherapy	60	84	0,001	56	57	0,001
Follow up	84	86	0,79	57	57	0,41
Overall treatment sequence	56	73	0,003	38	67	0,001



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Ray-Coquard I. J Clin Oncol.2005; 23:4414-4423.

3. Factors influencing the implementation of CPGs

<u>Patients</u>

Behavior

- Pressure/Preferences
- Comorbidity
- Rare diseases



Example of a rare disease: Soft tissue sarcoma

Summary of Practice guidelines for localized Soft tissue sarcoma

- 1. Plan biopsy first
- 2. Review by an expert pathologist if possible
- 3. Surgery by an experience surgeon in a multidisciplinary team (R0-R1)
- 4. Re-operation if whoops surgery in first line
- 5. Post operative treatment (or pre-operative)
- 6. Organise follow up after initial treatment



Compliance results

Conformity to CPG of sarcoma patients	N=634 (%)
optimal initial examination	409 (64.5)
initial surgery	375 (62)
radiation therapy	438 (87)
chemotherapy	534 (94)
follow-up	433 (82)

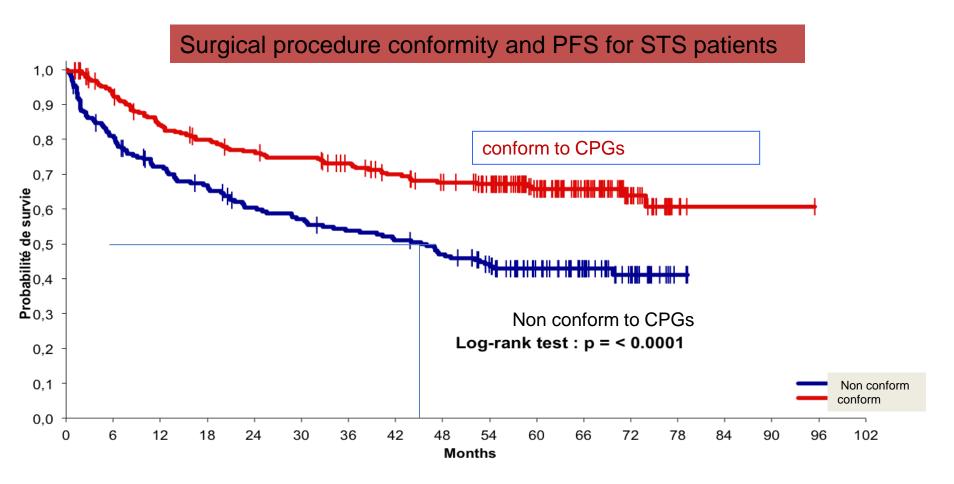
Global conformity : 254 (40%)



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Heudel P, ESMO.2012

Progression free survival





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Derbel O, oral presentation, ESMO 2012

Conformity results

Adhesion to	Specialized	Private or	Chi-2 test
CPGs	hospital	general hospital	

Diagnostic procedures	83.5%	54.2%	<0.001
Surgery	81.2%	54.7%	<0.001
Follow up	94.5%	76.1%	<0.001



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Heudel P, ESMO.2012

Study: Facilitators and Barriers

• **Design:** Before-after study with quantitative and qualitative data collection

• **Setting:** 22 agencies in Ontario that implemented 7 best practice guidelines; 2000-2001 (6-9 month implementation period)



Facilitators

Individual:

- Learning about the guideline through small group interaction
- Positive staff attitudes

Organizational:

- Leadership support
- Teamwork and collaboration

Environmental:

- Professional association support
- Inter-organizational collaboration and networks



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Ploeg, David. Worldviews on Evidence Based Nursing.2007, 4, 210-219.

4. Dissemination Strategies

• Making the guidelines accessible

• Publishing the guidelines in various ways

Informing the target audience of the guidelines' availability



4. Dissemination Strategies





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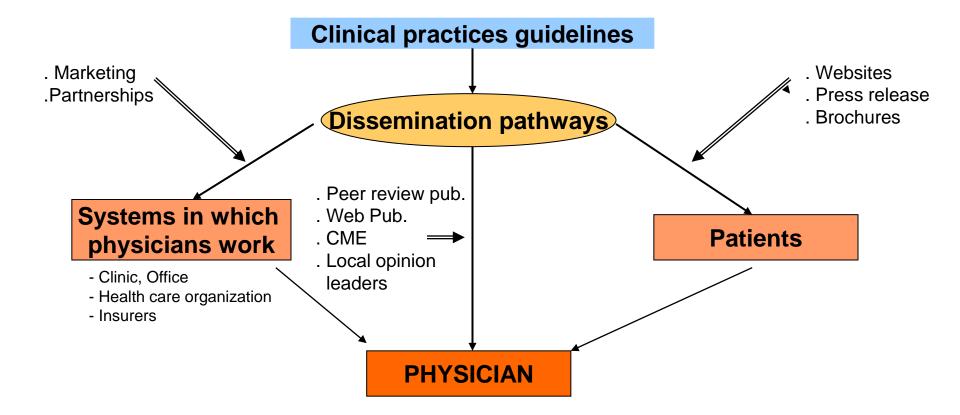
From a presentation given by Kerner JF, NCI ;2007

4.Implementation strategies

Consistently effective	Variably effective	Little or no effect	Unknown effectiveness
Educational outreach visits	Audit and feedback	Educational materials alone	Financial incentives
Decision-support systems and other reminders	Local opinion leaders	Didactic educational meetings	Administrative interventions
Interactive educational meetings	Local consensus processes		
-Multifaceted interventions	Patient-mediated interventions		
Mass media interventions			



4.Implementation strategies





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4. After implementation

- Feedback on the draft guideline that focuses on potential adopters:
 - perceptions of guideline characteristics
 - knowledge, real-life behaviors, involvement
 - perceptions of practice setting factors that might impede adoption



4. After implementation

• Monitor Knowlegde use

- Instrumental (behaviour): guideline adherence
- Conceptual (knowledge & attitudes & intentions)

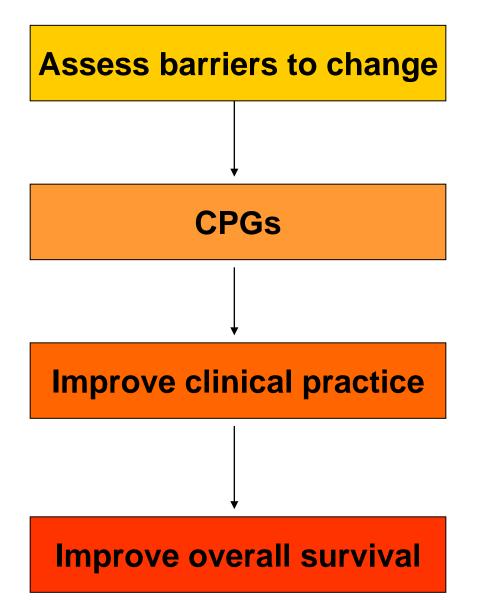
Evaluate outcome

Determine impact of using the guideline (patients health' outcomes, providers' outcome, organization outcomes)

Sustain knowledge use

- Are interventions needed to sustain ongoing use of the guideline?
- What ongoing monitoring of guideline use and impacts are needed?
- How long are the skills/knowledge maintained?







How to improve survival in cancer patients?

- Adapted drugs 'example: trastuzumab model'
- Willing patients (screening, hygiene measures)
- Scientific guidelines ("evidence-based guidelines")
- Top level physicians (medical practices)
- Efficient structures (hospital volume, quality program)



Our goal is to turn knowledge into applications that benefit people.

"To him who devotes his life to science, nothing can give more happiness than increasing the number of discoveries, but his cup of joy is full when the results of his studies immediately find practical applications."



Louis Pasteur



THANKS FOR YOUR ATTENTION

http://www.esmo.org/patients/guides-for-patients.html

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