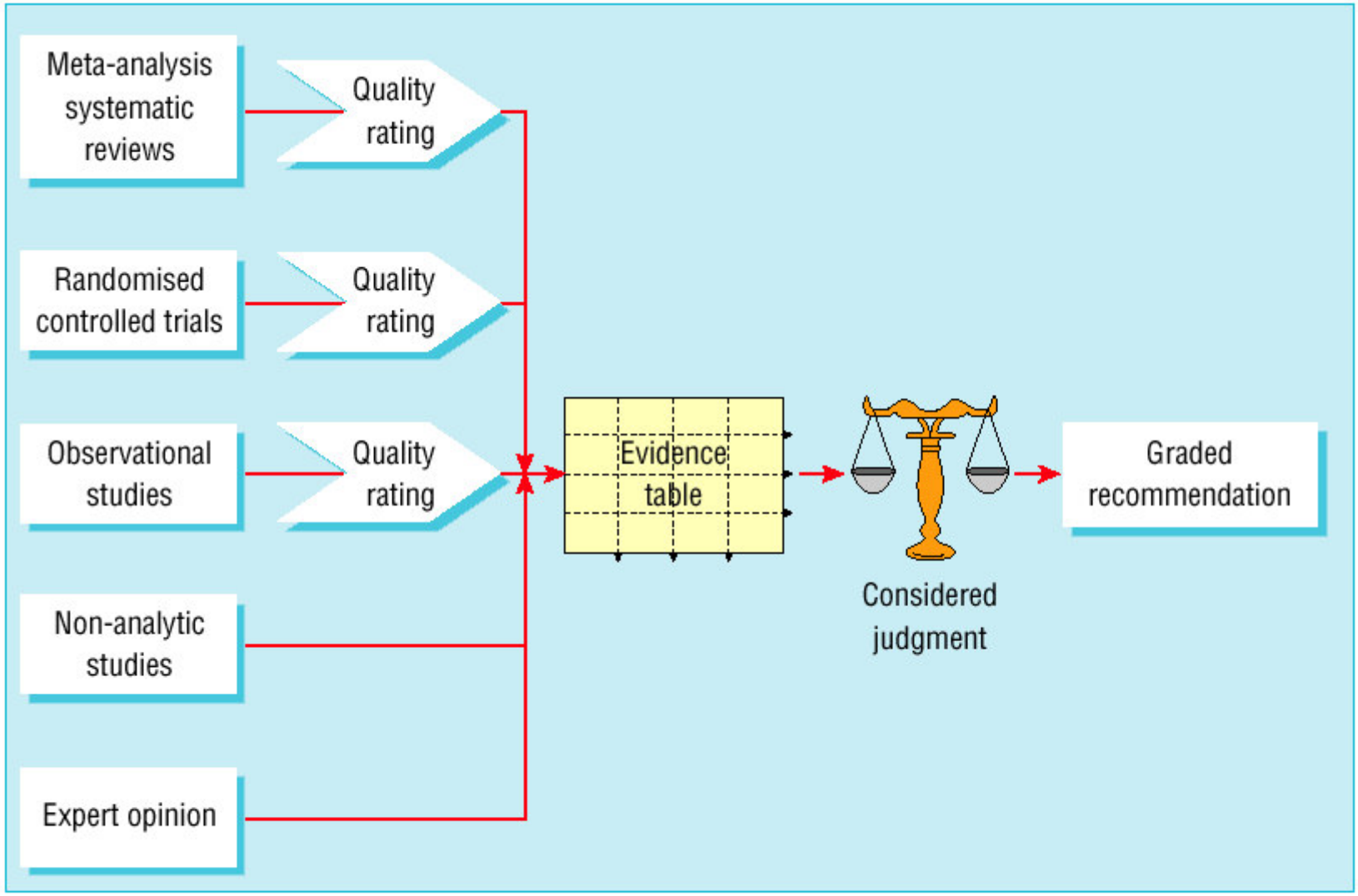
Università del Piemonte Orientale

Linee guida ed evidenza di efficacia

Fabrizio Faggiano

Cosa sono, oggi, le linee-guida?

- raccomandazioni "...elaborate in modo sistematico per aiutare ... il professionista ... a prendere decisioni relativamente al trattamento ... adatto a specifiche circostanze cliniche" (Field)
- basate sulle migliori prove di efficacia esistenti
- elaborate con metodologia esplicita
- da gruppi multidisciplinari
- sottoposte a consenso
- *peer reviewed*
- aggiornate in continuo



Overview of the process for developing and grading guideline recommendations

Produttori di LG

- Due livelli
  - Produzione a partire da studi primari (RCT) o secondari (rassegne sistematiche)
    - Ministeri della Sanità
    - Agenzie di *Technology Assessment*
    - Agenzie centrali di produzione di LG
    - Società scientifiche
  - Traduzione e adattamento di LG già esistenti
    - ASL
    - Ospedali
    - Regioni
    - (Oltre a quelle precedenti)

Table 1.1 Types of clinical and public health questions, ideal study types and major appraisal issues

Question	Study types	Major appraisal issues
1. Intervention	Systematic review RCTs Cohort study Case-control study	Randomisation Follow-up complete Blinding of patients and clinicians
2. Frequency/ rate (burden of illness)	Systematic review Cohort study Cross-sectional study	Sample frame Case ascertainment Adequate response/ follow-up achieved
3. Diagnostic test performance	Systematic review Cross-sectional study (random or consecutive sample)	Independent, blind comparison with 'gold standard' Appropriate selection of patients
4. Aetiology and risk factors	Systematic review Cohort study Case-control study	Groups only differ in exposure Outcomes measurement Reasonable evidence for causation
5. Prediction and prognosis	Systematic review Cohort/survival study	Inception cohort Sufficient follow-up

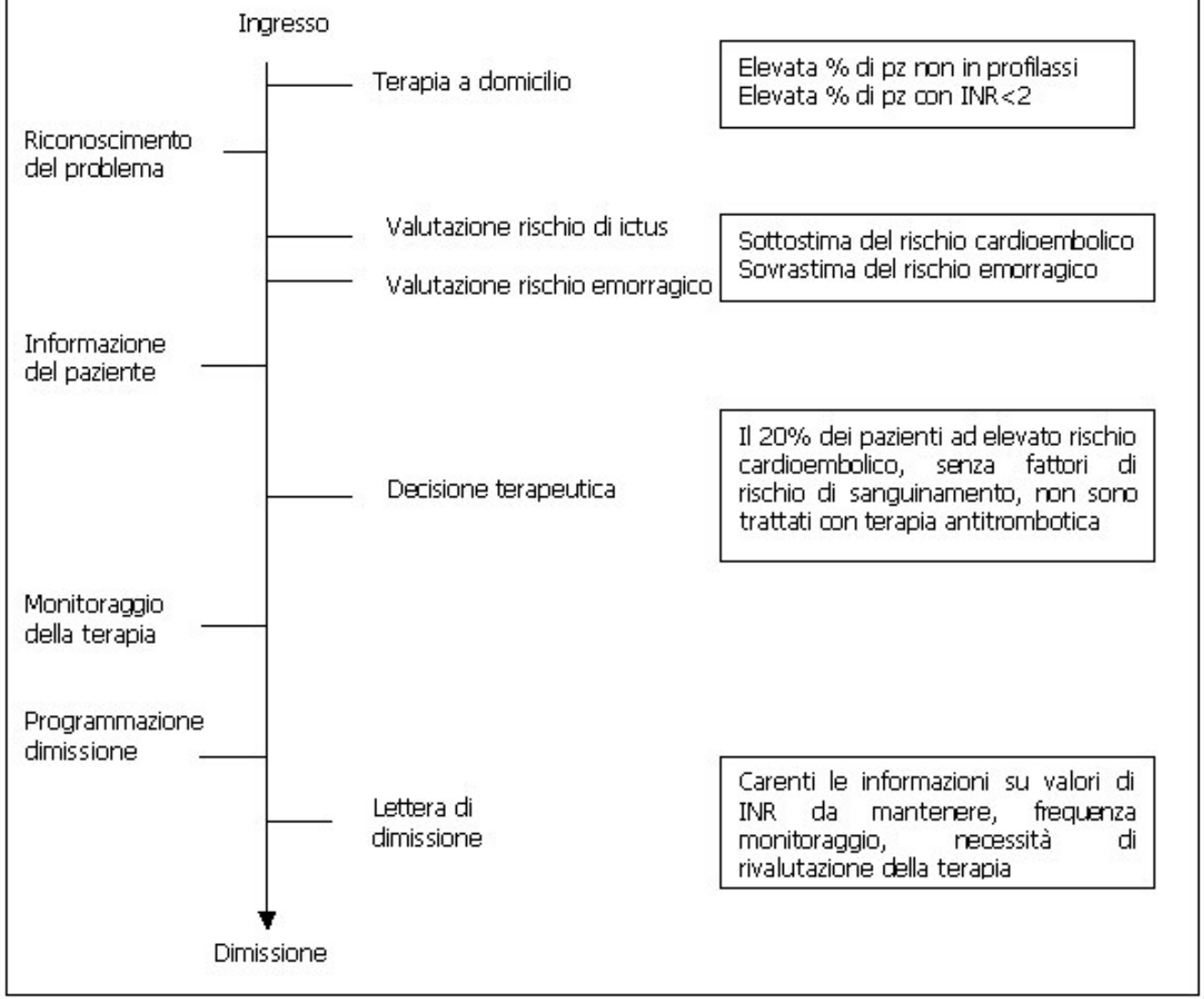
NHMRC Australia 2001

Criteri per la scelta degli argomenti

(ASO Molinette)

- **aree con ampia variabilità della pratica clinica o degli esiti (a livello locale)**
- terapia anticoagulante nella prevenzione degli eventi cardioembolici nei pazienti con fibrillazione atriale cronica o la profilassi della TVP
- **aree con improprio utilizzo delle risorse**
- indagini strumentali effettuate in assenza di prevedibiei utilità come la radiografia del cranio nei traumi cranici minori o alcuni farmaci prescritti al di là della loro utilità (ad esempio i gastroprotettori o i "neuroprotettori")
- **condizioni per le quali esistono trattamenti di provata efficacia ed in cui la morbidità o la mortalità possono essere ridotte**
- β-bloccanti nello scompenso cardiaco
- **rischio di danno iatrogeno o rischi significativi o costi elevati**
- ad esempio l'uso di antibiotici a rischio di creare resistenze o l'uso di certi antineoplastici
- **aree di priorità clinica per l'azienda o priorità indicate dal SSN**
- prevenzione delle lesioni da decubito, la riduzione delle degenze per particolari patologie o la Day Surgery
- **necessità di una Linea Guida espressa dalla comunità scientifica locale o da parte dell'utenza o delle sue rappresentanze** (URP, Associazioni di pazienti)

Paziente affetto da fibrillazione atriale non-valvolare
– Esempio di analisi del problema -



LG Piemontesi

Linee Guida

TUMORI DEL COLON-RETTO - linee guida clinico organizzative per la Regione Piemonte
Regione Piemonte Assessorato Sanità - Commissione Oncologica Regionale - Centro di Riferimento per l'Epidemiologia e la Prevenzione Oncologica in Piemonte
Settembre 2001

TUMORE DELLA MAMMELLA - linee guida clinico organizzative per la Regione Piemonte
Regione Piemonte Assessorato Sanità - Commissione Oncologica Regionale - Centro di Riferimento per l'Epidemiologia e la Prevenzione Oncologica in Piemonte
Luglio 2002

LINEE-GUIDA SULL'ICTUS ISCHEMICO
Gruppo di lavoro multidisciplinare per le linee-guida sull'ictus ischemico - Gruppo Evidence-Based Medicine
Azienda Sanitaria Ospedaliera San Giovanni Battista di Torino
Settembre 2002

REGIONE PIEMONTE
ASSESSORATO SANITA'

COR
Commissione Oncologica Regionale

CPO
Centro di Riferimento per l'Epidemiologia
e la Prevenzione Oncologica in Piemonte

TUMORI DEL COLON-RETTO

linee guida clinico organizzative per la Regione Piemonte

Forza delle raccomandazioni (1)

Category of evidence:

Ia) from meta-analysis of randomised controlled trials

Ib) from at least one randomised controlled trial

Iia) from at lease one controlled study without randomisation

Iib) from at lease one other type of quasi-experimental study

III) from non-experimental descriptive studies, such as comparative studies, correlation studies, and case.control studies

IV) from expert committee reports or opinions or clinical experience of respected authorities, or both

Shekelle, 1999

Forza delle raccomandazioni (2)

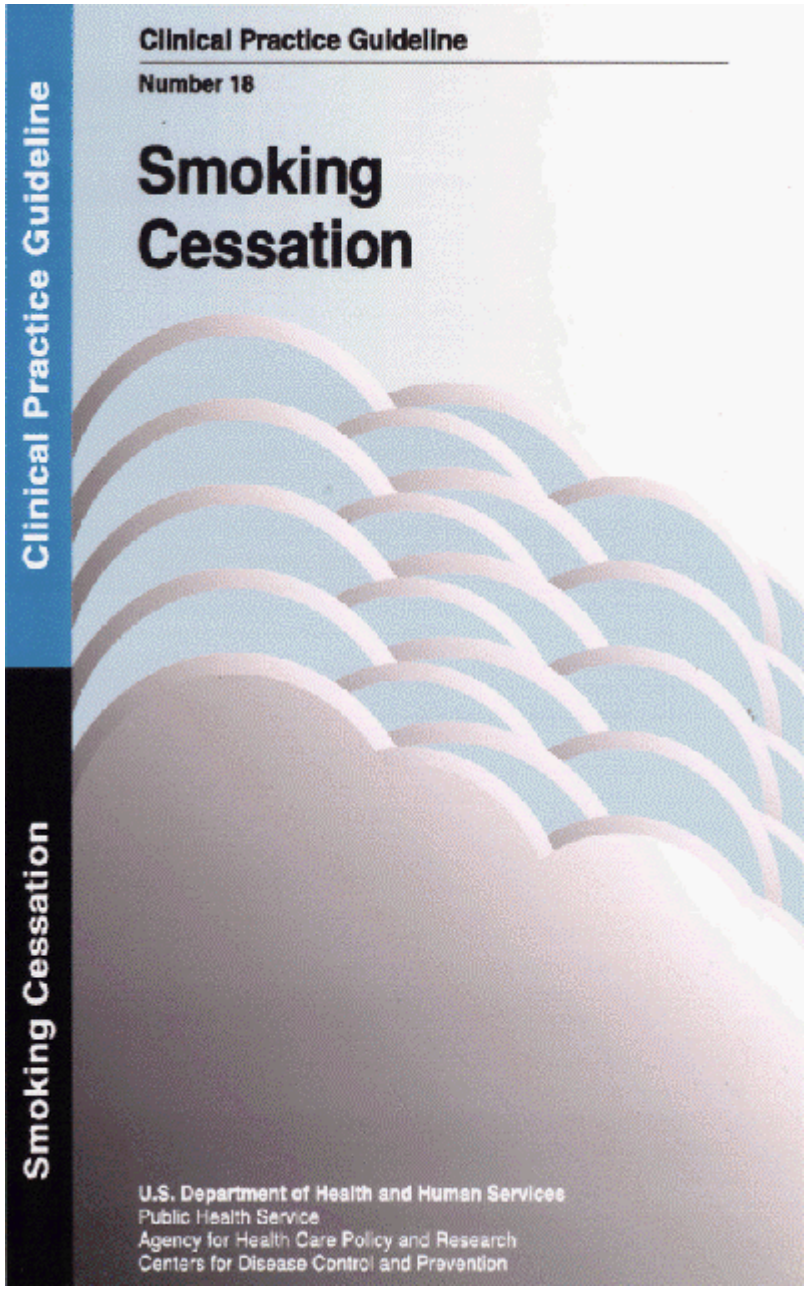
Strength of recommendation:

A) directly based on category I evidence

B) directly based on category II evidence or extrapolated recommendation from category I evidence

C) directly based on category III evidence or extrapolated recommendation from category I or II evidence

D) directly based on category IV evidence or extrapolated recommendation from category I, II or III evidence



Agency for Health Care Policy and Research (AHCPR)

Smoking cessation guideline

AHCPR - Clinical practice guideline # 18
Smoking Cessation

- **1. Overview**

- Organization of the Guideline and Other Products
- Guideline Development Methodology
    - Guideline Development Process
    - Search and Review of the Literature
        - Inclusion Criteria / Selection of Evidence.
        - Preparation of Evidence Tables / Analysis of Treatment Effect.
        - Outcome Data.
    - Meta-Analytic Techniques
        - Methodology and Limitations.
    - **Strength of Evidence**
    - Interpretation of Meta-Analysis Results
    - Caveats to Recommendation Use
    - External Review of the Guideline

Strenght of evidence

A. Multiple well-designed randomized clinical trials, directly relevant to the recommendation, yielded a consistent pattern of findings.
B. Some evidence from randomized clinical trials supported the recommendation, but the scientific support was not optimal.
C. Important clinical situations where the panel achieved consensus on the recommendation in the absence of relevant randomized controlled trials.

- **2. Recommendations for Three Target Audiences**

- Primary Care Clinicians
    - Training Clinicians To Intervene With Their Patients Who Smoke
    - Recommendations for Primary Care Clinicians

- Tobacco Cessation Specialists and Programs
    - Recommendations for Tobacco Cessation Specialists and Programs

- Health Care Administrators, Insurers, and Purchasers
    - Cost-Effectiveness of Smoking Cessation Interventions
    - Recommendations for Health Care Administrators, Insurers, and Purchasers

- **3. Evidence**

- Screen for Tobacco Use
- Advice To Quit Smoking
- Specialized Assessment
- Interventions
  - Type of Clinician
  - Treatment Formats
  - Efficacy of Self-Help Treatment Alone
  - Intensity of Person-to-Person Clinical Intervention
  - Content of Smoking Cessation Interventions
  - Person-to-Person Treatment: Duration and Number of Sessions
  - Smoking Cessation Pharmacotherapy
    - Transdermal Nicotine / Nicotine Gum / Other Nicotine Replacements
    - Over-the-Counter Nicotine Replacement Therapy.
    - Clonidine / Antidepressants / Anxiolytics/Benzodiazepines
    - Silver Acetate.
- Followup Assessment and Procedures
- Reimbursement for Smoking Cessation Treatment

Advice To Quit Smoking

- **Recommendation: All *physicians* should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates. (Strength of Evidence = A)**
- **Recommendation: All *clinicians* should strongly advise their patients who use tobacco to quit. Although studies have not independently addressed the impact of advice to quit by all types of nonphysician clinicians, it is reasonable to believe that such advice is effective in increasing their patients' long-term quit rates. (Strength of Evidence = B)**

Table 11. Meta-analysis: Efficacy of and estimated abstinence rates for advice to quit by a physician (n = 7 studies)

Advice	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
No advice to quit (reference group)	9	1.0	7.9
Physician advice to quit	10	1.3 (1.1-1.6)	10.2 (8.5-12.0)

Intensity of Clinical Interventions

- **Recommendation: Minimal interventions lasting less than 3 minutes increase abstinence rates. Every tobacco user should be offered at least a minimal intervention. (Strength of Evidence = A)**
- **Recommendation: There is a strong dose-response relation between the session length of person-to-person contact and successful treatment outcomes. Intensive interventions are more effective than less intensive interventions and should be used whenever possible. (Strength of Evidence = A)**

Table 12. Meta-analysis: Efficacy of and estimated abstinence rates for various intensity levels of person-to-person contact (n = 43 studies)

Level of contact	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
No contact	30	1.0	10.9
Minimal counseling (< 3 minutes)	19	1.3 (1.01, 1.6)	13.4 (10.9, 16.1)
Low intensity counseling (3 10 minutes)	16	1.6 (1.2, 2.0)	16.0 (12.8, 19.2)
Higher intensity counseling (> 10 minutes)	55	2.3 (2.0, 2.7)	22.1 (19.4, 24.7)

Formats of Psychosocial Treatments

- **Recommendation: Proactive telephone counseling, group counseling, and individual counseling formats are effective and should be used in smoking cessation interventions. (Strength of Evidence = A)**
- **Recommendation: Smoking cessation interventions that are delivered in multiple formats increase abstinence rates and should be encouraged. (Strength of Evidence = A)**

Table 17. Meta-analysis: Efficacy of and estimated abstinence rates for various types of format (n = 58 studies)

Format	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
No format	20	1.0	10.8
Self-help	93	1.2 (1.02, 1.3)	12.3 (10.9, 13.6)
Proactive telephone counseling	26	1.2 (1.1, 1.4)	13.1 (11.4, 14.8)
Group counseling	52	1.3 (1.1, 1.6)	13.9 (11.6, 16.1)
Individual counseling	67	1.7 (1.4, 2.0)	16.8 (14.7, 19.1)

Bupropion SR (Sustained Release Bupropion)

- **Recommendation: Bupropion SR is an efficacious smoking cessation treatment that patients should be encouraged to use. (Strength of Evidence = A)**

Table 25. Meta-analysis: Efficacy of and estimated abstinence rates for bupropion SR (n = 2 studies)

Pharmacotherapy	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Placebo	2	1.0	17.3
Bupropion SR	4	2.1 (1.5, 3.0)	30.5 (23.2, 37.8)

Nicotine repleacement

- **Recommendation: Nicotine gum, patch, nasal spray are efficaciouses smoking cessation treatments that patients should be encouraged to use. (Strength of Evidence = A)**
- **Recommendation: Clinicians should offer 4 mg rather than 2 mg nicotine gum to highly dependent smokers. (Strength of Evidence = B)**

Table 26. Meta-analysis: Efficacy of and estimated abstinence rates for 2 mg nicotine gum (n = 13 studies)

Pharmacotherapy	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Placebo	16	1.0	17.1
Nicotine gum	18	1.5 (1.3, 1.8)	23.7 (20.6, 26.7)

Table 27. Meta-analysis: Efficacy of and estimated abstinence rates for nicotine inhaler (n = 4 studies)

Pharmacotherapy	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Placebo	4	1.0	10.5
Nicotine inhaler	4	2.5 (1.7, 3.6)	22.8 (16.4, 29.2)

Table 28. Meta-analysis: Efficacy of and estimated abstinence rates for nicotine nasal spray (n = 3 studies)

Pharmacotherapy	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Placebo	3	1.0	13.9
Nicotine nasal spray	3	2.7 (1.8, 4.1)	30.5 (21.8, 39.2)

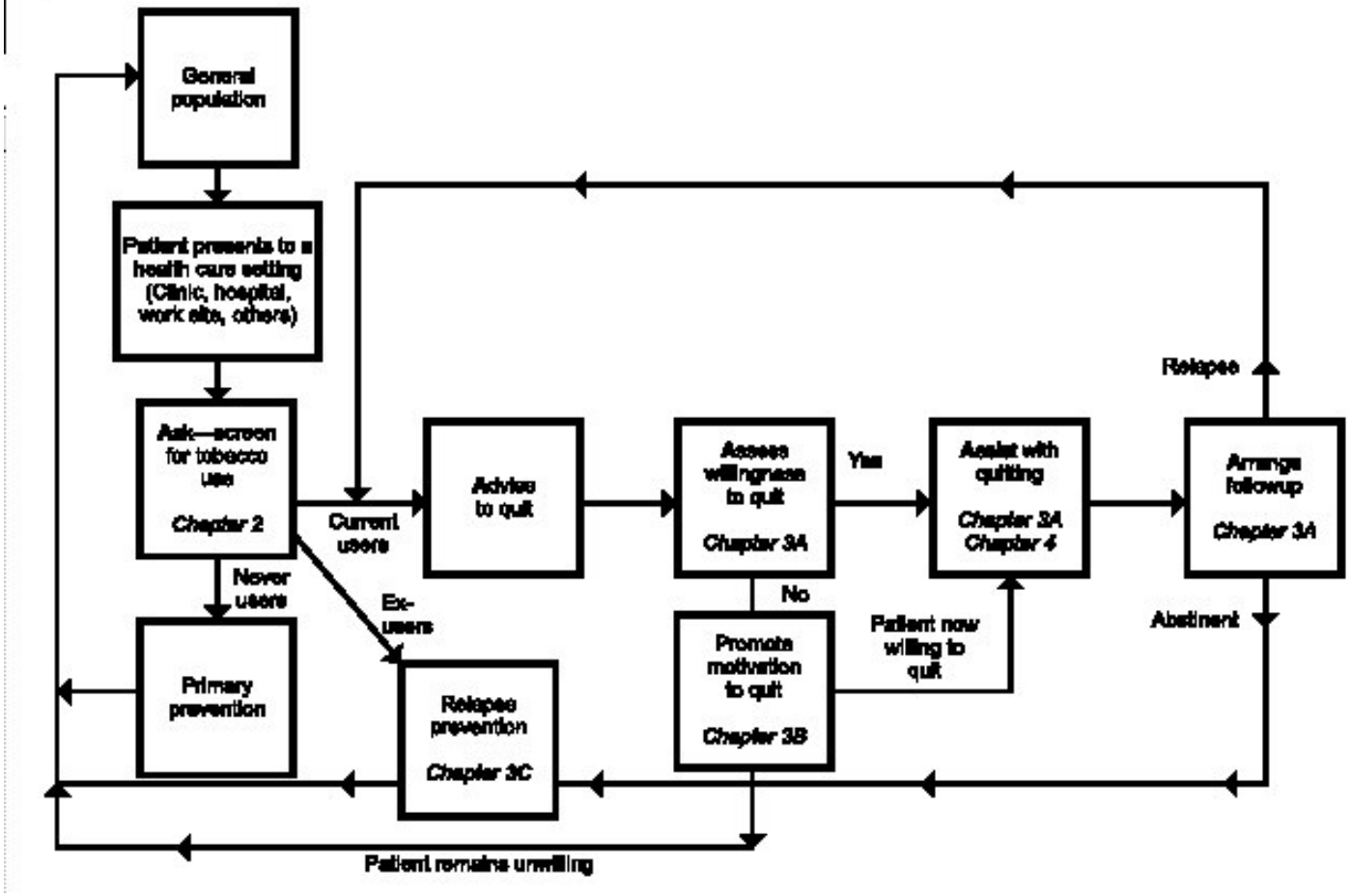
Organizzazione dell'intervento raccomandato

Table 3. The "5 A's" for brief intervention

Ask about tobacco use.	Identify and document tobacco use status for every patient at every visit. (Brief Strategy A1)
Advise to quit.	In a clear, strong and personalized manner urge every tobacco user to quit. (Brief Strategy A2)
Assess willingness to make a quit attempt.	Is the tobacco user willing to make a quit attempt at this time? (Brief Strategy A3)
Assist in quit attempt.	For the patient willing to make a quit attempt, use counseling and pharmacotherapy to help him or her quit. (Brief Strategy A4)
Arrange followup.	Schedule followup contact, preferably within the first week after the quit date. (Brief Strategy A5)

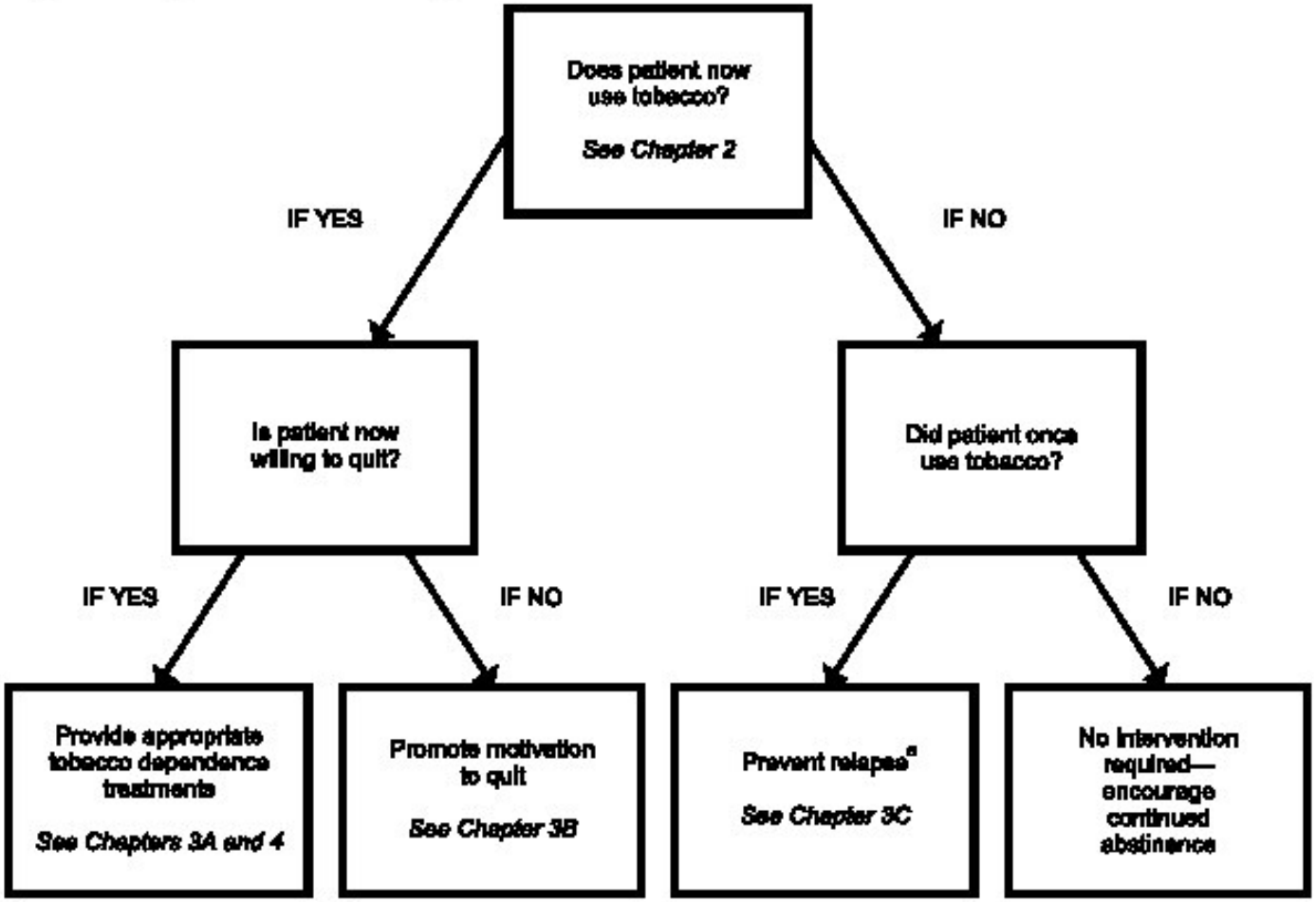
a livello di popolazione …

Figure 2. Model for treatment of tobacco use and dependence



…e a livello individuale

Figure 3. Algorithm for treating tobacco use



[a] Relapse prevention interventions are not necessary in the case of the adult who has not used tobacco for many years.

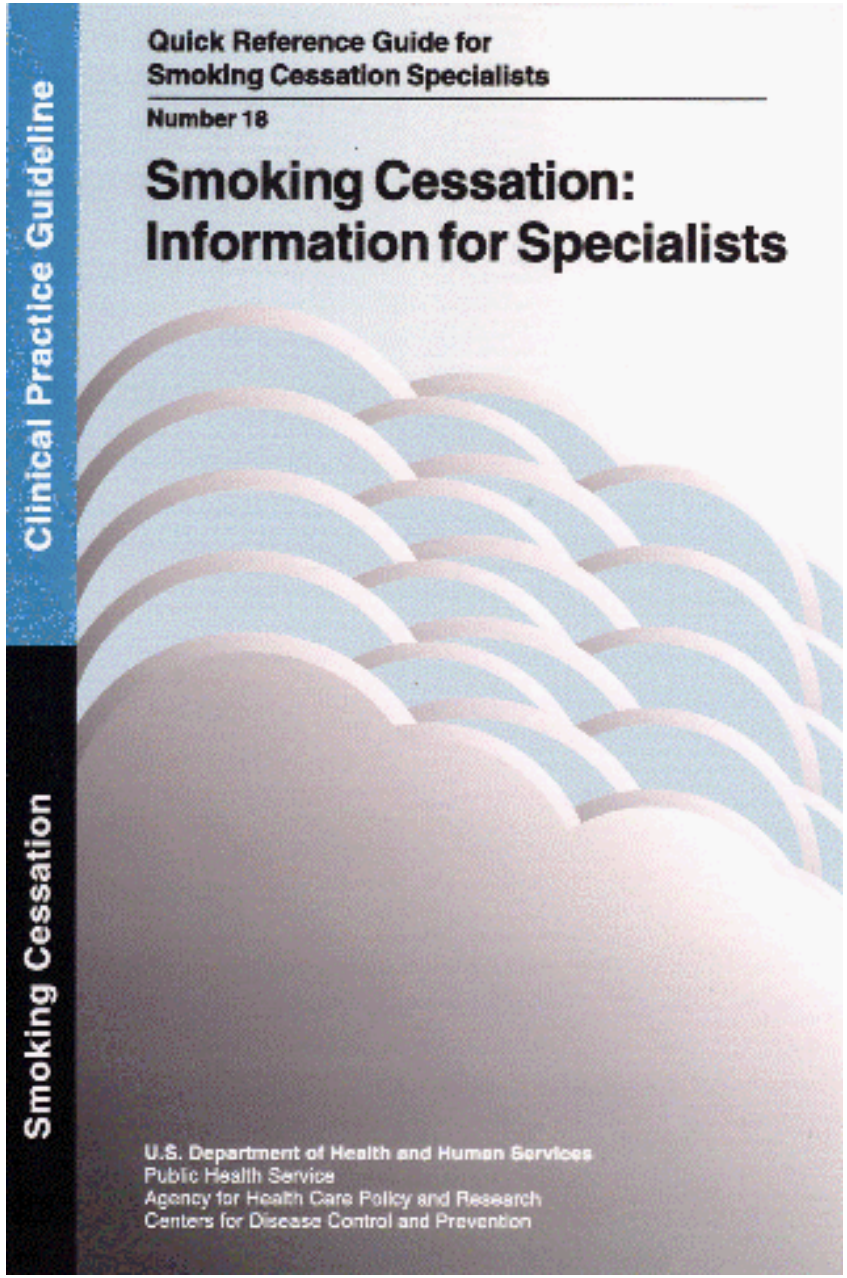
- **4. Promoting the Motivation To Quit and Preventing Relapse**

- Promoting the Motivation To Quit
- Relapse Prevention

- **5. Special Populations and Topics**

- Gender
- Racial and Ethnic Minorities
- Pregnancy
- Hospitalized Smokers
- Smokers With Psychiatric Comorbidity
- Weight Gain After Smoking Cessation
- Smokeless Tobacco Use
- Children and Adolescents: Primary Prevention of Tobacco Addiction

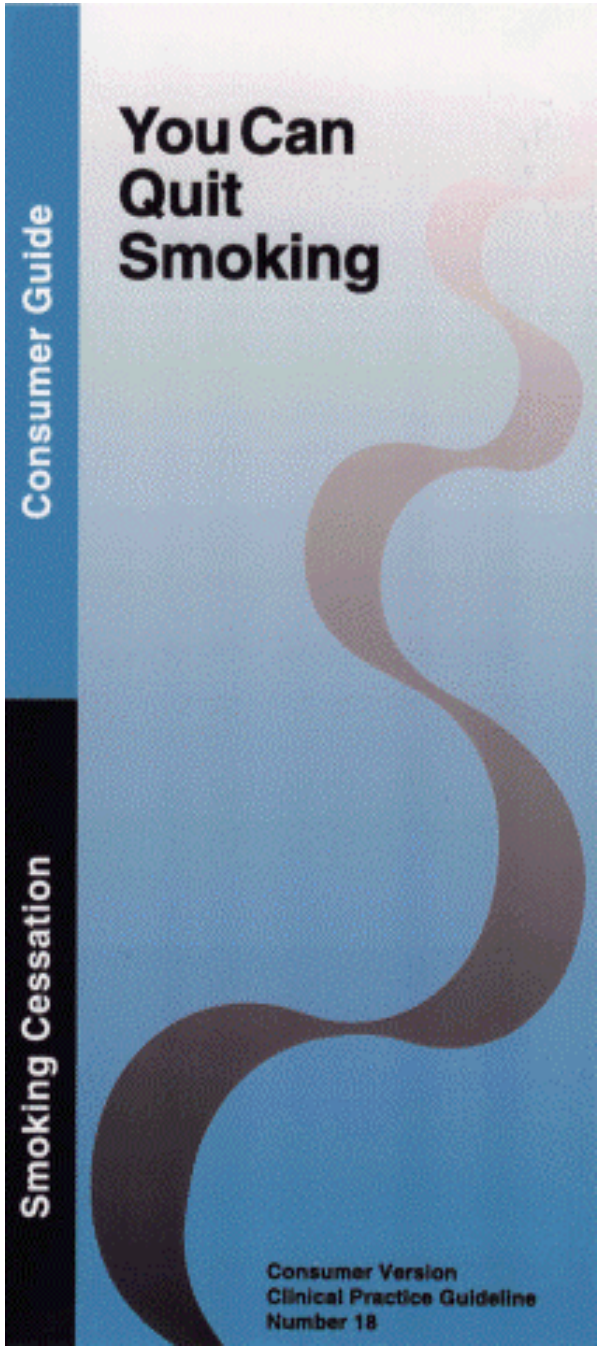
- References
- Glossary
- Contributors
    - Smoking Cessation Guideline Panel
    - Consultants
    - Project Staff
    - Additional Project Staff
    - Federal Liaisons
    - Canadian Government Liaison
    - Article Reviewers
    - AHCPR Staff
    - Contract Support
    - Peer Reviewers
- Annexes
- Strategies for the Primary Care Physician
- Strategies for the Tobacco Cessation Specialist
- Strategies for Health Care Administrators, Insurers, and Purchasers
- General Strategies



AHCPR

Smoking cessation guideline

Versione per gli specialisti



AHCPR

Smoking cessation guideline

Versione per gli utenti

AHCPR

Smoking cessation guideline

Versione per gli utenti (lingua spagnola)

Siti istituzionali di linee-guida

- Piano nazionale linee-guida:
  www.pnlg.it/
- Agency for Health Research and Quality
  www.ahrq.gov/
  www.guideline.gov/index.asp
- Health Technology Assessment UK
  - www.hta.nhsweb.nhs.uk/internat.htm
- Center for Disease Control
  www.cdc.gov
- GIMBE Gruppo Italiano Medicina Basata sull'Evidenza
  www.gimbe.org

Sette alternative alla EBM:

Basis of clinical practice

Basis for clinical decisions	Marker	Measuring device	Unit of measurement
Evidence	Randomised controlled trial	Meta-analysis	Odds ratio
Eminence	Radiance of white hair	Luminometer	Optical density
Vehemence	Level of stridency	Audiometer	Decibels
Eloquence (or elegance)	Smoothness of tongue or nap of suit	Teflometer	Adhesin score
Providence	Level of religious fervour	Sextant to measure angle of genuflection	International units of piety
Diffidence	Level of gloom	Nihilometer	Sighs
Nervousness	Litigation phobia level	Every conceivable test	Bank balance
Confidence*	Bravado	Sweat test	No sweat

*Applies only to surgeons.

Isaacs D et al **BMJ** VOLUME 319 18-25 DECEMBER 1999 www.bmj.com

Cercare l'EBN sul web

- Joanna Briggs Institute (JBI) Evidence Based Nursing and Midwifery www.joannabriggs.edu.au
- Uk Centre for Evidence Based Nursing www1.york.ac.uk/healthsciences/centres/evidence/cebn.htm
- Canadian Centre for Evidence Based Nursing
- New Zeland Centre of Evidence Based Nursing (Coll JBI)
- Victorian Centre for Nursing Practice Research (Coll JBI)
- Sarah Cole Hirsh Institute for Best Nursing Practices Based on Evidence (Germania)
- Scottish Intercollegiate Guidelines Network (SIGN) www.sign.ac.uk/guidelines/published/index.html

Cercare le prove di efficacia EBN sul web
ALTRI RIFERIMENTI

- Agency for Health Care Research and Quality (AHRQ)
- Centre for Disease Control and Prevention (CDC)
- Centro Cochrane di Oxford
- Centro Cochrane Italiano
- UK Clearinghouse for Information on the Assessment of Health Outcomes