

Globalize the Evidence, Localize the Decision

A Kaiser Permanente and BMJ Evidence Centre Collaborative Case Study



Klara Brunnhuber Carrie Davino-Ramaya Jill Haynes Carolyn Simpkins Gladys Tom

KAISER PERMANENTE. 활기찬 생활 BMJ Evidence Centre

care management institute KAISER PERMANENTE.

Knowledge Generation & Implementation: Challenges in Healthcare

- Large knowledge gaps vs. limited resources
- Time lag between robust new evidence and its application in clinical care
- Research applicability and generalizability
- Easy access to the same high-quality knowledge for clinicians, patients and consumers
- Rigorous EBM methods are resource-intensive, time-consuming and require specialized skill sets

KAISER PERMANENTE. 활기찬 생활 BMJ Evidence Centre

care management institute

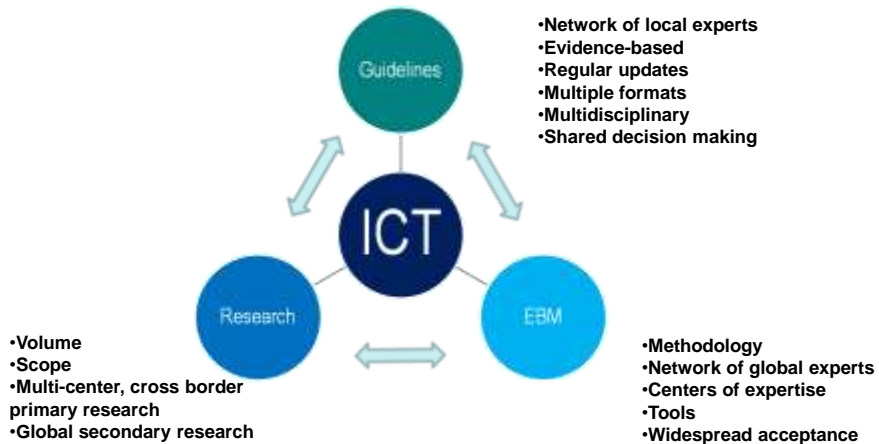
KAISER PERMANENTE.

The Role of Information and Communication Technologies (ICT) for Knowledge Generation and Distribution

- *“ICT have a tremendous potential to improve the quality of health care, to change the paradigms inherent to medical practice as well as the bases underlying the development and usage of knowledge”.*
- M. Fieschi, J. Dufour, P. Staccini, J. Gouvernet, and O. Bouhaddou. "Medical decision support systems: old dilemmas and new paradigms?" *Methods of information in medicine*, vol. 42, 2003, pp. 190-8.



ICT-supported Trends in Research, Guidelines and EBM Methodology



Advantages of collaborations between EBM centers and guideline developers

- **Pooling of resources, skills and expertise for:**
 - Enhanced EBM quality
 - Streamlined processes
 - On-demand scalability
 - Effective use of local expert knowledge and consensus
 - Development of point-of-care infrastructure/Implementation tools
 - Guideline Portal
 - Links to Electronic Health Record



care management institute

KAISER PERMANENTE.

Kaiser Permanente and BMJ Evidence Centre Collaboration

BASICS: Shared values and organizational similarities

- Trusted global organizations
- EBM and quality focus
- Established processes
- Quality Assurance & Governance structures
- In-house skill and expertise with access to experts
- Resource-rich environment
- Experience in point-of-care tool development
- Sophisticated ICT systems

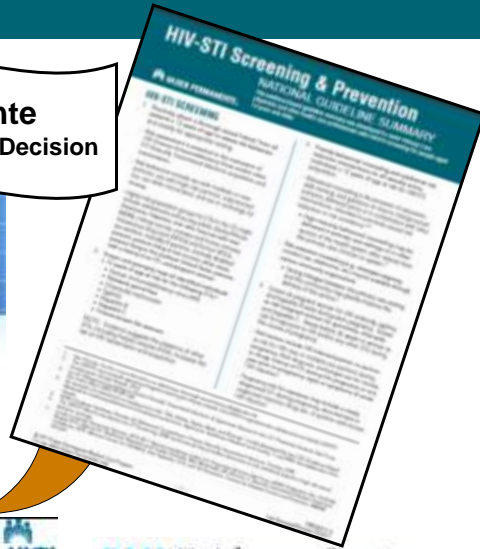


care management institute

KAISER PERMANENTE.

KP + BMJEC Collaboration = Formula for Success.....

BMJ + Kaiser Permanente
Globalize the Evidence, Localize the Decision



WHAT? Our Project:

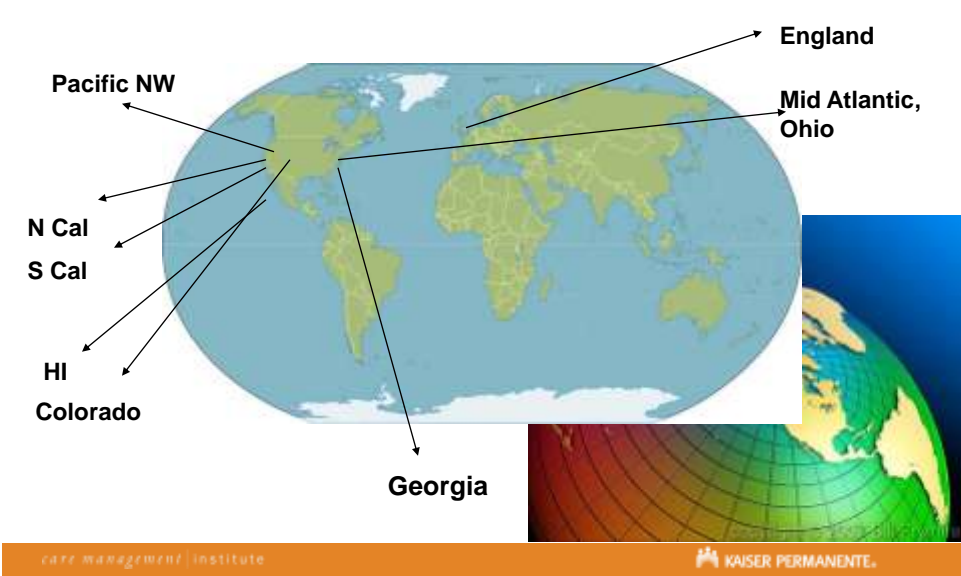
Evidence-Based / Risk-Based Screening in STIs

HIV / Chlamydia trachomatis / Gonorrhoea / Syphilis / Trichomoniasis
Hepatitis B / Hepatitis C

Population	All persons aged ≥ 12 at risk for acquiring HIV/STI (or younger if sexually active)
STI Screening Tests	Clinical Effectiveness and Diagnostic Accuracy
Impact of Comorbid STIs on HIV	Transition/Acquisition and Progress
Primary Care Setting:	Ambulatory setting



An international Endeavour:



WHO? Our Teams:

BMJEC:

- Information Specialist
- Clinical Editor
- Data Analysts
- Copy Editor
- Senior Editor
- Business Manager

KP:

- Clinician Lead
- Methodologist
- EBM Analysts
- Guideline Development Team (clinical experts)
- Guideline Quality Group
- National Guideline Development Group



WHEN? May 2010 to January 2011

HOW?

1. Developing the key clinical questions: PICO
2. Parameter setting
3. Search strategy and search
4. Appraisal with study inclusion/exclusion
5. Evidence quality assessment (incl Risk of Bias, AMSTAR, GRADE)
6. Evidence summaries
7. Quality review
8. Guideline and tool development
9. Implementation strategy

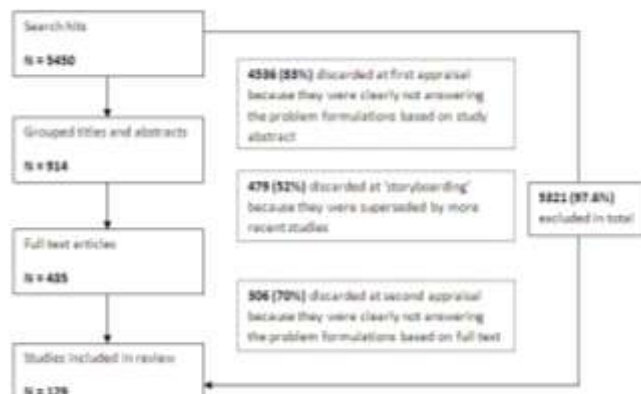
KAISER PERMANENTE. 활기찬 생활 BMJ Evidence Centre

care management institute

KAISER PERMANENTE.

Global evidence: 112 searches (7 databases) 129 studies from 36 countries (6 continents)

SRs, RCTs, observational and diagnostic studies



KAISER PERMANENTE. 활기찬 생활 BMJ Evidence Centre

care management institute

KAISER PERMANENTE.

Localized decisions

- Representations from 8 Kaiser regions throughout the US
- Aligned evidence with national regulatory requirements
- 4 full-assembly GDT meetings (STI prioritization, outcomes, implementation tools)
- Single agreed guideline, localized implementation

care management institute

KAISER PERMANENTE



Sharing Knowledge Across Boundaries: The Final Products



KAISER PERMANENTE. 활기찬 생활

BMJ|Evidence Centre

Guideline Summary
Clinician Tools

KAISER PERMANENTE. 활기찬 생활 BMJ Evidence Centre

care management institute KAISER PERMANENTE.

Any challenges?

- Time zones and cultural differences
- Merging methodologies
- Qualitative vs quantitative emphasis
- Sharing output templates
- Large workload
- Observational and diagnostic evidence
- Balancing efficiency vs flexibility
- Scope creep
- Managing GDT members

Lessons Learned...

- **Establish an early understanding of**
 - Strategic fit – Shared values and quality standards
 - Complementing heterogeneity – Skills, capabilities
 - Potential challenges – Time zones, cultural differences
 - Organizational processes, resources & capabilities
 - ICT resources and capabilities
- **Develop short- and long-term contracts**
 - Defining roles, responsibilities, expectations
 - Governance, quality assurance, conflict resolution
 - Financial considerations within larger context of collaboration
- **Agree processes, data extraction and output formats**
- **Develop communication strategy, e.g., for project status and feedback**
- **Be proactive and allow flexibility**

➤ **COMMUNICATE!**



care management institute

KAISER PERMANENTE.

WHAT NEXT?

- Implementation strategy:
 - Publication
 - EHR
 - Guideline Portal
- Further collaborations to address other knowledge gaps
- Promoting the concept of EBM collaborations across organizations and country boundaries towards faster and better development of guidelines



care management institute

KAISER PERMANENTE.

Globalize the Evidence, Localize the Decision

ANY QUESTIONS?

care management institute

KAISER PERMANENTE



Addendum: PICO Clinical Questions & Problem Formulations



KAISER PERMANENTE. **활기찬 생활**

BMJ|Evidence Centre

Clinical Question #1

Clinical Question	What are the most clinically useful STI risk assessment tools?
Population	All persons aged ≥ 12 at risk for acquiring HIV/STI
Health Intervention	Risk assessment tools
Important Health Outcomes	<ul style="list-style-type: none"> • Increased and earlier STI case identification • Appropriate risk stratification • Harms of assessment tools

KAISER PERMANENTE.  활기찬 생활  BMJ Evidence Centre

care management institute

 KAISER PERMANENTE.

Clinical Question #2

Clinical Question	What are the recommended STI screening tests for HIV, gonorrhea, chlamydia, syphilis, trichomonas, and hepatitis B and C?
Population	All persons aged ≥ 12 at risk for acquiring HIV/STI, including known high-risk groups (such as pregnant women, adolescents, men having sex with men).
Health Intervention	Screening and appropriate treatment tests
Important Health Outcomes	<ul style="list-style-type: none"> • Decrease in HIV/STI morbidity and mortality • Increased and earlier STI case identification • Increased HIV/STI case prevention • Benefits/harms of screening (including false negatives/positives) • Anxiety, labeling • Performance in predicting/proving presence of HIV/STI infection (sensitivity, specificity, positive and negative predictive value)

KAISER PERMANENTE.  활기찬 생활  BMJ Evidence Centre

care management institute

 KAISER PERMANENTE.

Clinical Question #3

Clinical Question	Does the presence of other STIs (and by what mechanism, i.e., genital ulcers and other inflammatory STIs) increase the likelihood of transmitting and/or acquiring HIV?
Population	All persons aged ≥ 12 at risk for acquiring HIV/STI, including known high-risk groups (such as pregnant women, adolescents, men having sex with men).
Health Intervention	HIV Screening and appropriate treatment tests
Important Health Outcomes	<ul style="list-style-type: none"> • Decrease in HIV/STI morbidity and mortality • Increased and earlier STI case identification • Increased HIV/STI case prevention • Benefits/harms of screening (including false negatives/positives) • Anxiety, labeling

KAISER PERMANENTE. 활기찬 생활 BMJ Evidence Centre

care management institute

KAISER PERMANENTE.

Clinical Question #4

Clinical Question	Does patient counseling reduce STI transmission and risk behavior?
Population	All persons aged ≥ 12 at risk for acquiring HIV/STI
Health Intervention	<ul style="list-style-type: none"> • One-on-one counseling • Group counseling
Important Health Outcomes	<ul style="list-style-type: none"> • Decrease in HIV/STI mortality • Decrease in HIV/STI morbidity • Increased and earlier HIV/STI case identification • Increased HIV/STI case prevention • Benefits, harms of counseling

KAISER PERMANENTE. 활기찬 생활 BMJ Evidence Centre

care management institute

KAISER PERMANENTE.

Clinical Question #5

Clinical Question	Should all pregnant women be screened for STI for each pregnancy and if so, when should pregnant women at increased risk be rescreened?
Population	All pregnant women aged ≥ 12 at risk for acquiring HIV/STI
Intervention	STI screening
Important Health Outcomes	Maternal and fetus/infant - <ul style="list-style-type: none"> • Infection, morbidity and mortality • Benefits/harms of routine screening • Anxiety, labeling (maternal) • Increased and earlier STI case identification • Increased HIV/STI case prevention