



# Moving beyond EBP

Evidence based decision making for effective and sustainable change

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## Thomas Huxley 1825-1895

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*The deepest sin against the human mind  
is to believe things without evidence*



# Challenges

Preaching to the converted

Lots of practical examples

Theoretical approaches presented



## Malcolm Gladwell 2005

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*Truly successful decision making relies  
on a balance between deliberate and  
instinctive thinking*



# Evidence based decision making

- Framework to facilitate ‘deliberate’ thinking
- Theory and practice
- Address your questions



# Presentation

- Background
- Evidence based decision making
- Evidence based systems change



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# Centre for Clinical Effectiveness

## Mission

To improve health care by enabling evidence-based decision-making

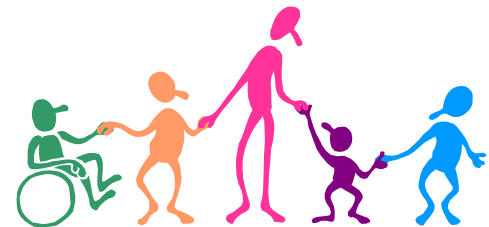


# Health for Kids in the South East

## Aim

To improve health outcomes for children and young people in the Southern Health catchment area through

- Best practice
- Partnerships





# Partnership for clinical effectiveness

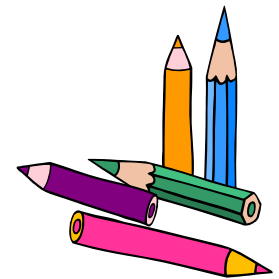


- Academic and hospital
- General practitioners
- Community & local government
- State government
- Advocacy groups
- Research



# Strategies

1. GP integration
2. Clinical practice guidelines and clinical paths
3. Culture of clinical effectiveness
4. Innovative ambulatory hospital services
5. Community health activities
6. Consumer involvement





## Each strategy underpinned by:

- Best practice
- Partnerships
  - ✓ Sustainability
  - ✓ Avoidance of duplication
  - ✓ Facilitation of existing systems



# Evidence based change

- Guidelines and Clinical Paths
  - Asthma, Croup, Bronchiolitis, Gastroenteritis
  - Management of enteral feeding in preterm infants
- New services and models of care
  - Community Asthma Education Service
  - Paediatric Rapid Review Service
  - Coordinating Care for Kids



# NICS Fellowship

- Investigating the factors associated with evidence-based change in a health service
- Captured, documented and utilised 'learnings' of what to do and what not to do



# Acknowledgements

Victorian Department of Human Services

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Monash Institute of Health Services Research

William and Vera Houston Memorial Trust

Windermere Foundation

William Buckland Foundation





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# Evidence based medicine

*EBM is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of EBM means integrating individual **clinical expertise** with the best available external clinical **evidence** from systematic research.*

*Sackett DL et al. 1996 Evidence based medicine: what it is and what it isn't. BMJ 312 (7023) 71-72*



# EBM criticisms

- Exclusive – focusing on doctors alone
- Only applies to clinical practice eg doctor-patient interaction
- RCTs are required for any treatment to have the support of ‘evidence’ to make any decisions
- Evidence from tightly controlled clinical trials is not generalisable to real patients
- Another way of saying evidence-based guidelines
- ‘Cookbook’ medicine, there is no need to think, clinicians just follow the recipe – a recipe for potential disaster
- Loss of autonomy for doctors
- Focuses on the ‘science’ of medicine and leaves no room for the ‘art’ of medicine



# Evidence based practice

*Evidence based clinical practice is an approach to decision making in which the **clinician uses** the best **evidence** available, in **consultation with the patient**, to decide upon the option which suits that patient best.*

*Muir Gray JA. 1997 Evidence-based healthcare: how to make health policy and management decisions. London: Churchill Livingstone.*



# Evidence based practice





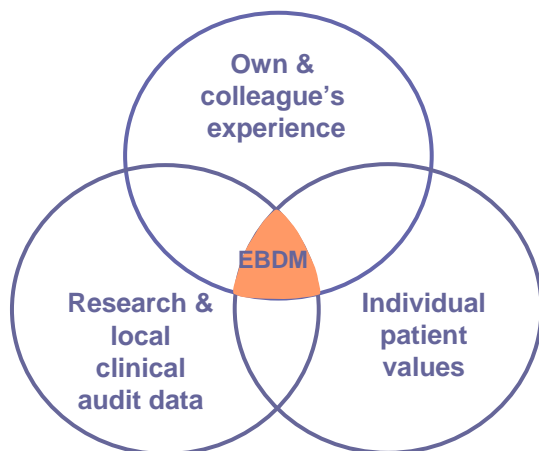
# Evidence based decision making

- Beyond the clinical setting
- Same three-part model applied to health service managers, public health practitioners or policy makers

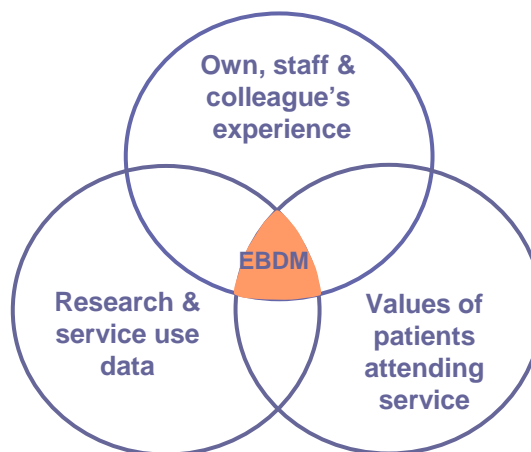


# Evidence based decision making

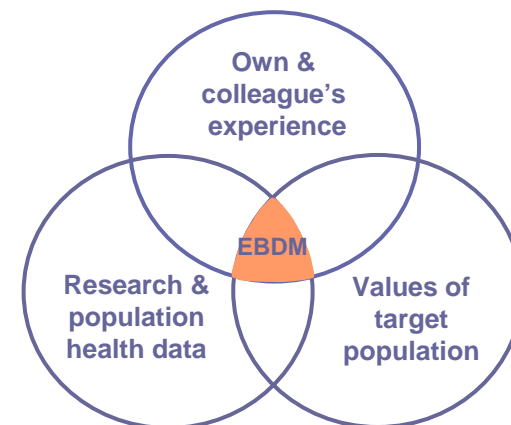
## Clinician



## Health service manager



## Public health practitioner or policy maker





# Evidence based decision making

Who could argue with the premise that you should take into account the best available relevant information and involve those who will be affected by it when making a decision?



# But.....

- Knowledge and skills
  - Find, appraise, synthesise evidence
  - Understanding of the complexities of change in health service organisations
  - Qualitative and quantitative evaluation methods
- Resources
  - Money
  - Time
  - Access
- Systems and processes that enable and support practice change



# EBM

# versus

# EBDM

- Exclusive – focusing on doctors alone

- Inclusive – useful for all decision makers



# EBM

# versus

# EBDM

- Only applies to clinical practice eg doctor-patient interaction

- Applies to clinical practice AND other types of decision making



## EBM

versus

## EBDM

- RCTs are required for any treatment to have the support of 'evidence' to make any decisions
- Draws on the best types of evidence to address the question of interest, and where evidence is not available, bases decisions on professional experience and patient perspectives



## EBM

versus

## EBDM

- Evidence from tightly controlled clinical trials is not generalisable to real patients

- Uses data from controlled trials AND from other 'real' and/or local data



## EBM

versus

## EBDM

- Another way of saying evidence-based guidelines

- A model to develop guidelines that provide 'guidance' not proscriptio



## EBM

versus

## EBDM

- ‘Cookbook’ medicine, there is no need to think, clinicians just follow the recipe – a recipe for potential disaster
- Combines evidence with professional experience – evidence does not replace clinical judgement, but informs it



# EBM

# versus

# EBDM

- Loss of autonomy for doctors

- Empowers doctors and other clinicians to make their own decisions in light of the best available information



## EBM

versus

## EBDM

- Focuses on the ‘science’ of medicine and leaves no room for the ‘art’ of medicine
- Combines the science of medicine (research and data) with the art of medicine (professional expertise) for the best of both worlds.



# Evidence based decision making





# Research evidence

- Published research literature
  - Guidelines, Systematic reviews, Primary research
- Public health data
  - State, national, international
- Local routinely collected data
  - Health service utilisation
  - Electronic patient record data
- Local project information
  - Surveys, clinical audit, etc

Qualitative  
and  
Quantitative



## Research evidence in HFK

- All of the above
- Time, skills and resources



## Isaac Asimov 1920-1992

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*No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be*



# Professional expertise

- Clinicians
  - Relevant professional groups at all levels of seniority representing each clinical area and campus
- Educators
- Managers
- Support services
  - Diagnostic services, Medical records, Admin staff



# Professional expertise in HFK

- Executive sponsor
- Guideline Development Groups
  - Clinical champions
  - Department invited to send representative
  - Terms of Reference signed off
  - Represent colleagues → consult
- HMO teaching sessions
- Nursing in-service
- Personal invitation
- Surveys
- Evaluation forms attached to clinical paths



## John Abrams 2006

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*If the people who make the decisions are the people who will also bear the consequences of those decisions, perhaps better decisions will result*



# Consumer preferences

- Actual and potential service users
  - Patients, clients, consumers, population
  - Other health professionals



# Consumers

- **Recruit**
  - Advertise, inform, interview, select
- **Educate**
  - Explain role, train, manage expectations
- **Support**
  - Champion role to others, meet practical needs
- **Involve**
  - Ask for input on everything, in many different ways
- **Value**
  - Consumer perspective overtly valued as equal to others
- **Review**
  - Ask for feedback on the process, and the role



# HFK Consumer Advisory Group

- 'Patient Tours'
  - What works, what doesn't work, how can we improve it?
- Discussion groups
- Nominal Group Technique
- Surveys
  - Mail, email, phone
- Representatives on GDGs, Working groups, Committees



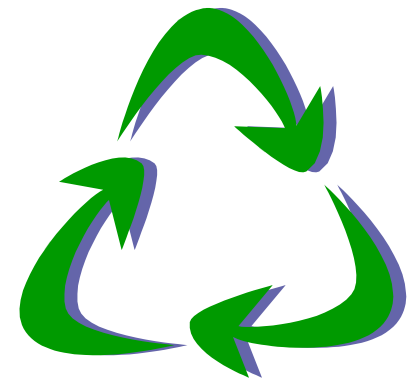
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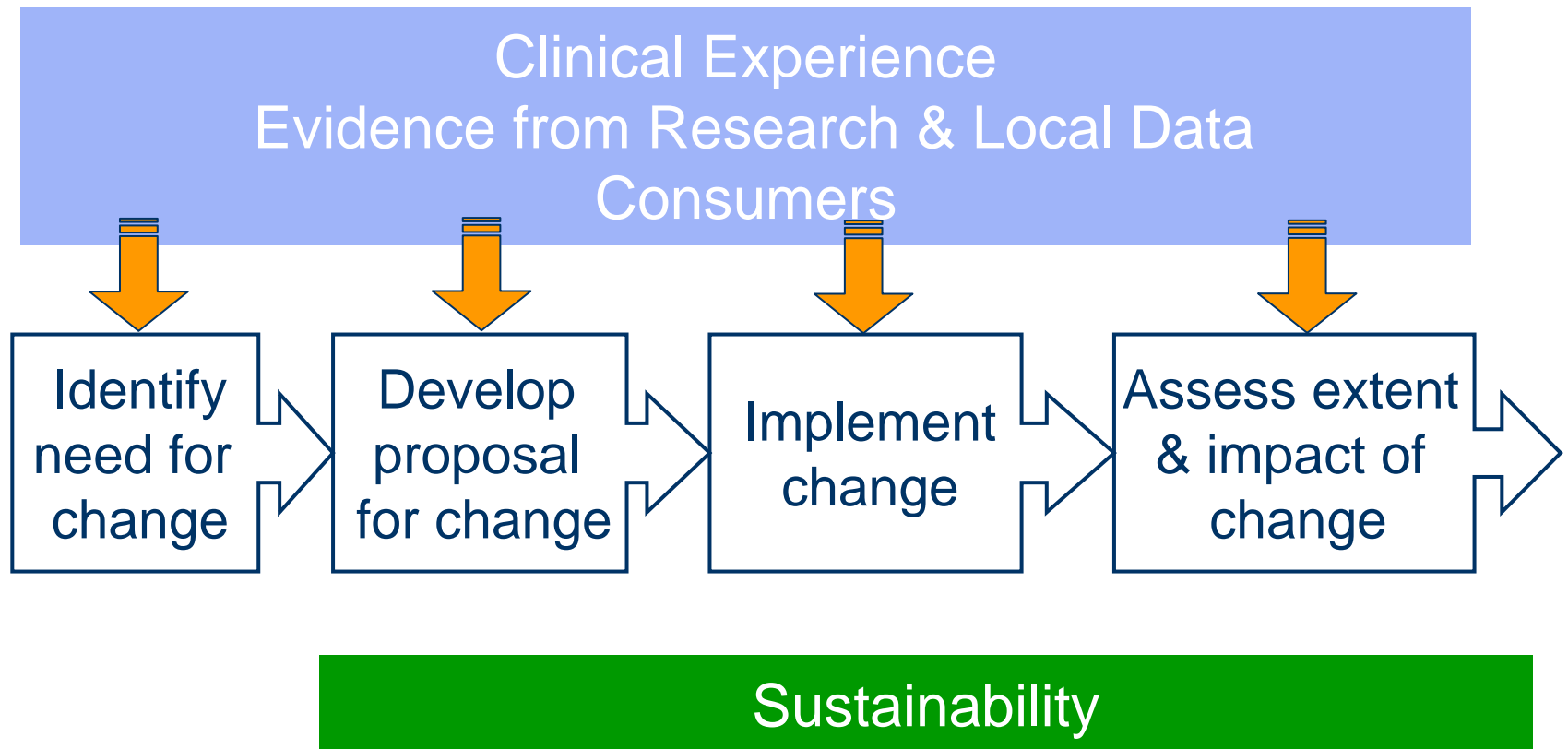
# Sustainable Change

- Requires
  - Implementation of effective strategies to achieve change
  - Maintenance of the changes achieved





# Evidence-based change process






# Step 1. Identify the need for change

- What needs to change? What is the problem?
- How do you know it needs to change?
- How can the need for change be measured?
  - Research and local data
  - Clinicians
  - Consumers



## Step 2. Develop a proposal for change

- What is the required change? What is the solution?
-  ● Is it sustainable?
- Who is involved?
  - Define setting, target groups, stakeholders
- How do you know the proposal will be effective?
  - Research and local data
  - Clinicians
  - Consumers




# Characteristics for success

Proposals are more likely to be successful if

- Based on sound evidence or expert consensus
- Presented by credible organisation
- Able to be tested and adapted
- Relative advantage evident
- Low complexity
- Compatible with status quo
- Attractive and accessible format



## Step 3. Implement the change

- What are the barriers to and facilitators of the change?
  - What steps will you take to overcome the barriers and use the facilitators?
    - Research and local data
    - Clinicians
    - Consumers
-  Are these sustainable?



# Types of barriers and enablers

- External factors
  - Structural (eg financial disincentives)
  - Organisational (eg inappropriate skill mix, lack of facilities or equipment)
  - Peer group (eg local standards of care not in line with desired practice)
  - Individual (eg knowledge, attitudes, skills)
  - Professional-patient interaction (eg problems with information processing).
- Guideline factors
  - Complexity, utility, appearance



# Effectiveness of interventions

- Usually effective
  - Decision support, reminders
  - Educational outreach
  - Interactive education
  - Multifaceted interventions
- Variable effectiveness
  - Audit and feedback
  - Local consensus meetings
  - Opinion leaders
  - Patient-mediated interventions



# Effectiveness of interventions

- Of little or no effect
  - Educational materials
  - Courses, conferences
- Effectiveness unknown
  - Financial stimuli
  - Administrative or organisational interventions

Strategies and their effectiveness: a review of reviews (Bero et al 1998) cited in Grol R, Wensing M, Eccles M. 2005 Improving patient care. The implementation of change in clinical practice. Elsevier London




# Characteristics for success

- Implementation plans are more likely to be effective if they
  - Include effective strategies designed on barriers and facilitators
  - Integrate change into normal activities
  - Take a risk management approach
  - Include a pilot phase





## Step 4. Evaluate the change

- Choose measurable targets linked to original measures that change was required (Step 1)
- Use measures suggested by and relevant to:
  - Research and local data
  - Clinicians
  - Consumers
-  Are these measures sustainable?



# Choosing outcomes

- Process measures – Have we implemented the solution?

- Implementation plan delivered
- Target group aware and accepting

 Change happening

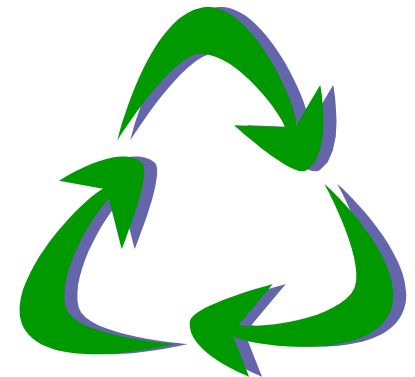
 Outcome measures – Did it fix the problem?

- Original problem resolved
- Original need for change no longer present



# Sustainability & Maintenance

- Confirm the benefit
  - Feedback evaluation data
- Embed in the organisation
  - “This is what we do here”
- Integrate into fixed routines
  - Part of role, process or system





# Effective and sustainable change

- Implement effective strategies to achieve change
- At each stage in the change process:
  - Include input from:
    - Research and local data
    - Clinicians
    - Consumers
  - Consider sustainability
- Maintain the changes achieved



# Evidence based decision making

- Builds on the strong foundation of EBP
- Takes a common sense approach
- Ensures that the best available information from all relevant sources is used to make the best possible decision
- Can be applied to all types of decisions, from single patient interactions to development of new services and demand management.



# More information

Centre for Clinical Effectiveness

[www.mihsr.org/cce](http://www.mihsr.org/cce)

Health for Kids in the South East

[www.mihsr.org/cce/hfk](http://www.mihsr.org/cce/hfk)

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