Workshop on EBM

Clinical Practice Guidelines make them work for you

GIN EC Community ICEM program (RES 3)

Barriers and Enablers in Chest Pain Guideline Implementation

Reviewing local barriers and enablers
Effective implementation strategies

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To err is human

Problems in CPG implementation

- Not follow at all, or
- Follow but misuse, that include
  - overuse,
  - underuse, or
  - follow inappropriately

Invention is hard, but dissemination is even harder

70 % of Canadian and UK emergency physicians applied Ottawa rules

vs.

< 1/3 of US, French, and Spanish physicians.

- over 45 % of Hong Kong doctors used long-acting beta-2 agonist alone (LABA monotherapy) without inhaled corticosteroid to treat asthma.
- dangerous
- as it is associated with increased mortality.

German study of 25,250 patients,

- 1/2 were assigned appropriate LDL cholesterol targets.
- If adhered to CPG, 80 fewer heart attacks, strokes and cardiovascular deaths per 1,000 patients over a 10 year period.

How about ACS?

- In Israel, ACS patients with impaired physical and cognitive status, had received less aspirin, clopidogrel, platelet glycoprotein IIb/IIIa receptor antagonists, statins, beta-blockers, and even less PCI.
- Mortality rate increased.

Let's share your experience !

What are the problems during your ***local*** implementation of ACS CPG ?

Opinions from the floor are mostly welcome.

My local experience at HKSAR….

- local adaptation to develop our local CPG
- Concordance evidence, easily prepared
- Outcome expectancy
- Frequent encounter of chest pain subjects
- User-friendly ACS protocol to follow
- Why should there be still problems?

Defensive medicine

- Frontlines feel unease in missing a single case of AMI, medico-legal concern,
- No perfect CPG, not details enough to cover the clinical differentiation of chest pain
- Leads to over-investigation, increase LOS, and over-admission to EM ward

Hear what local champions say..

1. Build up awareness and an EBM culture in your department.
2. Good communication is the key to buy-in from all stakeholders. Show them why there is a need to change.
3. Conduct regular audits.
4. Tie bonus or have a carrot and stick system to ensure adherence.
5. No matter what you do, there will always be a spectrum of people in your dept; some are early adopters, others are laggards.

The processes of innovation and dissemination have their own rules and their own pace.

Health care leaders should understand innovation and how it spreads, respect the diversity in change itself (e.g. reinvention), and draw on the best of social science for guidance.

7 recommendations:

1. Find sound innovations
2. Find and support "innovators"
3. Invest in "early adopters"
4. Make early adopter activity observable
5. Trust and enable reinvention
6. Create a slack for change
7. Lead by example

Great barriers especially those concerning doctors.

- This includes guidelines for clinical problems and instructions for routines.
- We do not have a system to check continuously the performance of our staff whether the guidelines are followed and if deviated, the reasons.
- This requires recourses for the audit and we are tied up with daily clinical work.

Simply publishing guidelines will not lead to adoption.

Elements need to be implemented non-linearly (not in sequence but flexibly implemented)

1. Strong opinion leaders in the practice environment that champion the guidelines.

2. A mechanism for the guidelines to be translated into the local practice workflow (if the guidelines are not translated into practical steps and left to individuals to interpret, slower or no change).

3. A change management process to get everyone on board.

4. Opportunities for people that implement the guidelines to discuss issues of implementation, and learn from each other as to what successful steps were and what were challenges (an environment for knowledge exchange and discussion at the frontline level). ……..

…cont'd…..

5. Demonstrate results and improvements rapidly, so that people get feedback on the effects that the changes have made. This is very important to encourage sustainability of changed behaviors.

6. It would be very helpful to have a place where the changes and positive gains get recognized (either as a research abstract, a publication, an award, or a public forum where the changes are highlighted and people involved congratulated). This would really galvanize the group's resolve to maintain change.

7. The upper management (director of ED, health authorities, governments) needs to have full buy in into these guidelines implementation, and be part of the change process.

Have a chat with frontlines:

Frontlines will be delighted to follow CPGs, especially if CPGs are

- (a). Related to important clinical consequences such as mortality,
- (b). Fully understood and accepted,
- (c). User-friendly and flexible,
- (d). Without resources constraints such as manpower, facilities and time.

- To the frontlines, role modeling from seniors is the most important trigger to galvanize their obedience, followed by communication channel to voice out their opinions.

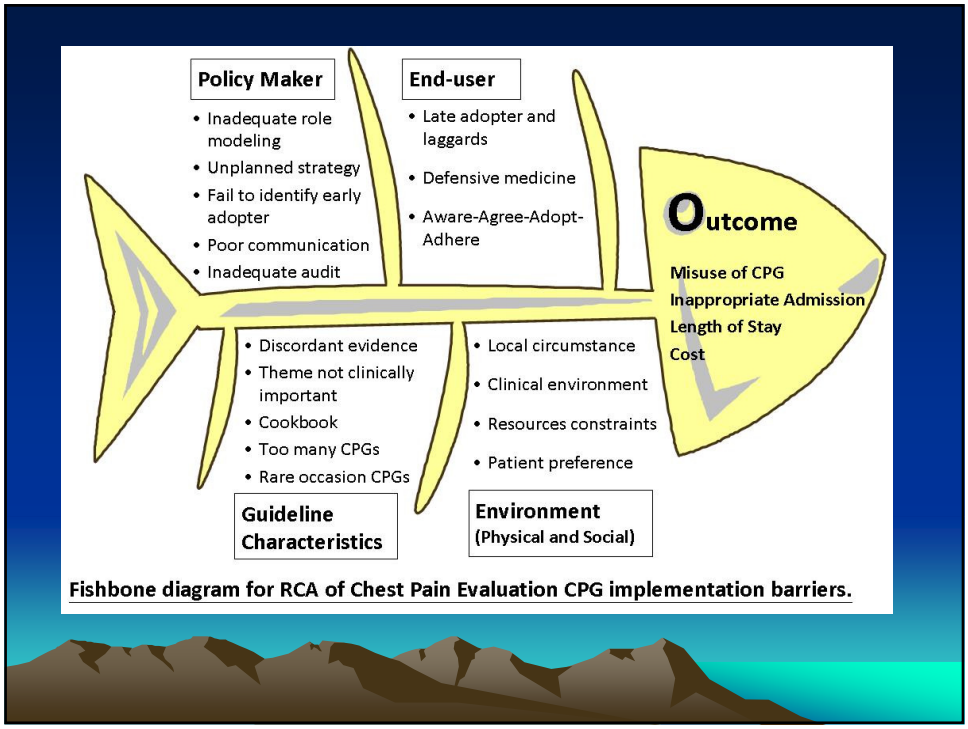
Literature searches

- Quantitative
- Usually multi-centre cluster RCTs, and
- Before and after studies

- Complex issues
- Inconclusive evidences
- Realist review (quantitative and qualitative)

Fishbone diagram

- Using the chest pain CPG as an example
- Misuse of CPG, Inappropriate admission, Length of Stay (LOS) at A&E Unit, and Costing, as the outcomes.
- Policy Makers, End-users, Guideline Characteristics, and Environment (Physical and Social) as 4 main roots



Fishbone diagram for RCA of Chest Pain Evaluation CPG implementation barriers.

Limitations of fishbone…

1. no weighting
2. How the main domains are inter-related.
3. operator-dependent, may miss items in fishbone diagram

Haddon Matrix to illustrate evidence-based implementation (EBI) strategies

- Pre-implementation phase,
- Implementation phase, and
- Post-implementation phase

Table of Haddon Matrix for evidence-based implementation (EBI) strategies

EBI Strategies	Policy Maker	End-user	Guideline Characteristics	Environment (Physical/Social)
Pre-implement phase	Role modeling Planned strategy Do a Pilot testing Ready to change	Build up EBM culture Ready to change Get on board Aware-Agree-Adopt-Adhere	High clinical impact Concordant evidences Outcome expectancy Recommendations' prioritization User-friendly	React to internal and external driving forces Local adaptation
Implement phase	Invest early adopters Champions broadcast	Experience sharing Litigation reassurance	Memory aids/Reminders Change for unanticipated effects	Social marketing
Post-Implement phase	Collect feedbacks Carrot and stick Audit, research and publications	Performance pledge	Regular update	Patients' satisfaction surveys

Questions from the floor…….

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- End.

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