



# Evidence Based Implementation of Guidelines

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# Terminology

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# Guidelines

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- Summary of best available evidence
- “Guide” decisions
- Brief!
- Developed by many groups
- Varying quality
- Guidelines can be considered as systematic statements to help clinicians and patients make decisions about care



# Implementation

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- Executing or applying a process, standard, policy.
- “Standards of care”
- Hospital, Health Department  
“Policy”



# Guidelines and Implementation

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- ? Never the twain shall meet
- AGREE criteria
- GLIA criteria



# Bundles

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- A group of interventions related to a disease process that when executed together result in a better outcome than when implemented individually
  - IHI

# Bundles

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- Grouping “key components” of diagnostic or treatment issues for a given presentation.
- Asthma (pseudo bundle)
  - Assessment of severity
  - Spirometry
  - Spacers
  - Steroids
  - Interim asthma plan
  - NOT CXR / antibiotics / nebulisers



# Implementation strategies

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One way...



# Written Guidelines

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Often Bulky

ANZCA acute pain guidelines 348 pages!

Often sent with cover letter

Usually have one of two fates...







Another strategy...

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# Recent e-mails

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## ○ Current strategies

- Dear Colleagues,

Could you please have a look at this sliding scale protocol and implement. I believe this will improve our practice

- Dr X

- Dear Colleagues,

This form will become part of the medical record. As cannulas are a significant cause of problems this may be a useful tool to reduce problems.

- Dr X



Insert

Home

Page  
Up

Delete

End

Page  
Down



# Problems - Insulin

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- These were forwarded – forwarded – forwarded
- The sliding scale was very confusing
- Increased workload
- What evidence is there that I should do this?
  - Who wrote this, why – no ownership



# Problems - cannulas

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- How will the form get into the medical record?
  - Does this mean I'll see it
  - will it take over my life?
  - Will people fill it in?
- How can cannulas be a problem?
- All doctors wash their hands – benefit proved centuries ago. They were clean when they went in – it's the nurses!
- My patients don't get cannula infections

# Problems

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- Simple strategy
  - Write a protocol
  - Disseminate via e-mail
- Complex organisation
  - Clinicians knowledge
  - Clinician resistance
  - Clerical, forms in notes...and out of hours?
  - People reading forms, looking for them in the notes
  - Multiple wards



# The main problem

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- PEOPLE RESIST CHANGE



WHY?

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# Resistance to Change

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- What's wrong with the old way?
- What's better about this way?
- How much work does it mean for me?
- I've been doing it this way for years.
- So, everything I used to do was wrong?
- These guidelines are 348 pages long...



# Why we resist change

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- Our own clinical experience
  - Evidence vs anecdote
- Natural history of the illness
- Ritual
- A need to do something
- Patients' expectation (real or assumed)



# Barriers

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- Anecdotal medicine
  - My patients are different
- I know how to...
  - I don't believe the evidence
  - I don't know that I don't know
- I don't follow recipes



# The Big Question is...

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How do we get evidence into practice?



# Knowledge Translation

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- We know what the answer isn't!



Dissemination does not =  
Implementation

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# Evidence based Implementation

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- An analogy to Evidence Based Medicine
- EBM Triad
  - Best available evidence
  - Applied to an individual patient
  - Judiciously used
- ? Needs implementation tools

# EBI Triad

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- Best available evidence
  - On implementation
- Applied to an individual unit / department
  - They're not all the same
    - Rehab v ED
    - ED 1 v ED 2
- Judiciously used
  - The Implementer as a "broker"



# Key Features

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Most interventions can be successful in some circumstances, but none are effective in all.



# Key features 1

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- Focus on departmental issues rather than individual clinicians
  - Cannulas
    - Rates on infection
    - Effects on LOS
    - M and M figures
  - Insulin
    - Evidence for glycaemic control
    - Results of our performance

# Key Features 2

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- Be Specific
  - What do you want to change?
    - Cannulas
      - Early infections – wash hands
      - Infections on days 3,4...15 – change them earlier
      - Sites of cannula

# Key features 3

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- Identify barriers early
  - Patient barriers
    - Beliefs / anecdotes
  - Individual clinician barriers
    - Don't like EBM / challenged / work load / cook book / too proscriptive / lack of knowledge
  - Department team
    - Multidisciplinary
  - Organisation / processes
    - Eg IT in our ED



# Key features 4

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- Ownership
- Get the team involved early in
  - Understanding the evidence-practice gap
  - Having the desire to change “metanoia”
  - Being involved in development of tools
  - Being integral to the implementation



# Key features 5

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- Guideline Features
  - Workable documents
  - Bundles
  - Based on good evidence
  - Simple not complex
  - Doesn't require major structural or organisational changes
  - Specific



# Key features 6

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- Guideline (Bundle) Implementation
  - Audit and feedback
  - Reminders
  - Education (detailing)
  - Opinion Leaders
  - Passive strategies generally ineffective

# Key features 7

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- Simplify what you are trying to achieve
- ANZCA pain guidelines as written will sit on a shelf (or cause it to collapse)
- Need to pick the eyes out of it



# Cardiac Pain

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- 2 pages in the guideline
- Key Messages box
- Morphine is an effective and appropriate analgesic for acute cardiac pain
- Nitroglycerine is an effective and appropriate agent in the treatment of acute ischaemic chest pain
- Oxygen..

# ACS Pathway

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- **Pain relief**
- Anginine 300 – 600ug SL if systolic BP > 100mmHg
- Morphine 2.5mg increments until pain free
- Consider GTN infusion

# TGL series

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- Any of the following regimens can be expected to cure the majority of acute uncomplicated lower UTI in nonpregnant women. Use:
  - 1 **trimethoprim** 300 mg orally, daily for 3 days  
OR
  - 2 **cephalexin** 500 mg orally, 12-hourly for 5 days  
OR
  - 3 **amoxicillin+clavulanate** 500+125 mg orally, 12-hourly for 5 days  
OR
  - 4 **nitrofurantoin** 50 mg orally, 6-hourly for 5 days.
- Fluoroquinolones should not be used as first-line drugs as they are the only orally active drugs available for infections due to *Pseudomonas aeruginosa* and other multiresistant bacteria.
- If resistance to all the above drugs is proven, a suitable alternative is:
  - **norfloxacin** 400 mg orally, 12-hourly for 3 days.
- Treatment failures are usually due to a resistant organism, re-infection with a similar organism, or an unsuspected underlying abnormality of the urinary tract for which further investigations should be considered.
- If relapse occurs, pyelonephritis should be considered and treatment given for 10 to 15 days.

# Summary

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- An evidence base exists that can guide your efforts to implement change.
- The principles are like EBM
  - Best available evidence
  - Applied to an individual group
  - Judiciously used



# Summary

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- Simplify as much as possible
- Involve those you want to change early and give them a sense of ownership
- Know your barriers.