

Implementation strategies

Evidence-based guidelines for nutritional support of the critically ill: Guideline development conference

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Change management

"We must remember that there is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its outcome than to take the lead in *introducing a new order* of things.

Because the innovator has for enemies all those who have done well under the old order, and lukewarm defenders among those who may do well out of the new."

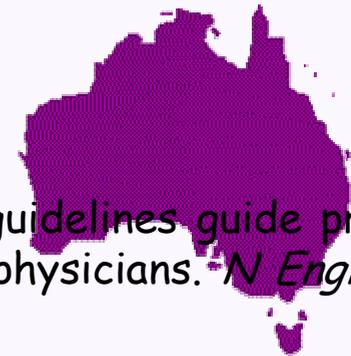


Machiavelli, *The Prince*



Guidelines do not implement themselves.

Lomas J, Anderson GM, Domnick-Pierre K et al. Do practice guidelines guide practice? The effect of a consensus statement on the practice of physicians. *N Engl J Med* 1989;**321**:1306-1311





Beckhard's Change Equation

Change is more likely if...

$$\begin{array}{|c|} \hline \text{Perceived} \\ \text{Power of} \\ \text{vision} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Perceived} \\ \text{Pain of} \\ \text{Present} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Perceived} \\ \text{Feasibility of} \\ \text{First Steps} \\ \hline \end{array} > \begin{array}{|c|} \hline \text{Perceived} \\ \text{Pain of} \\ \text{Change} \\ \hline \end{array}$$

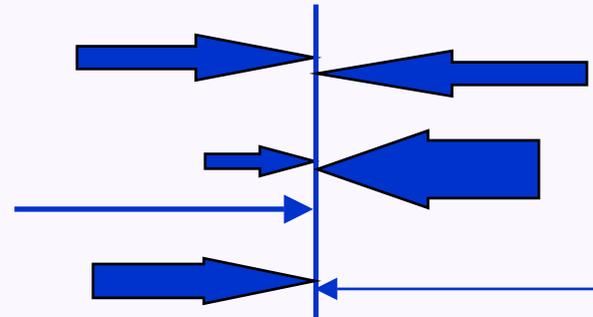




Force Field Analysis

Pressures for or against change

Drivers



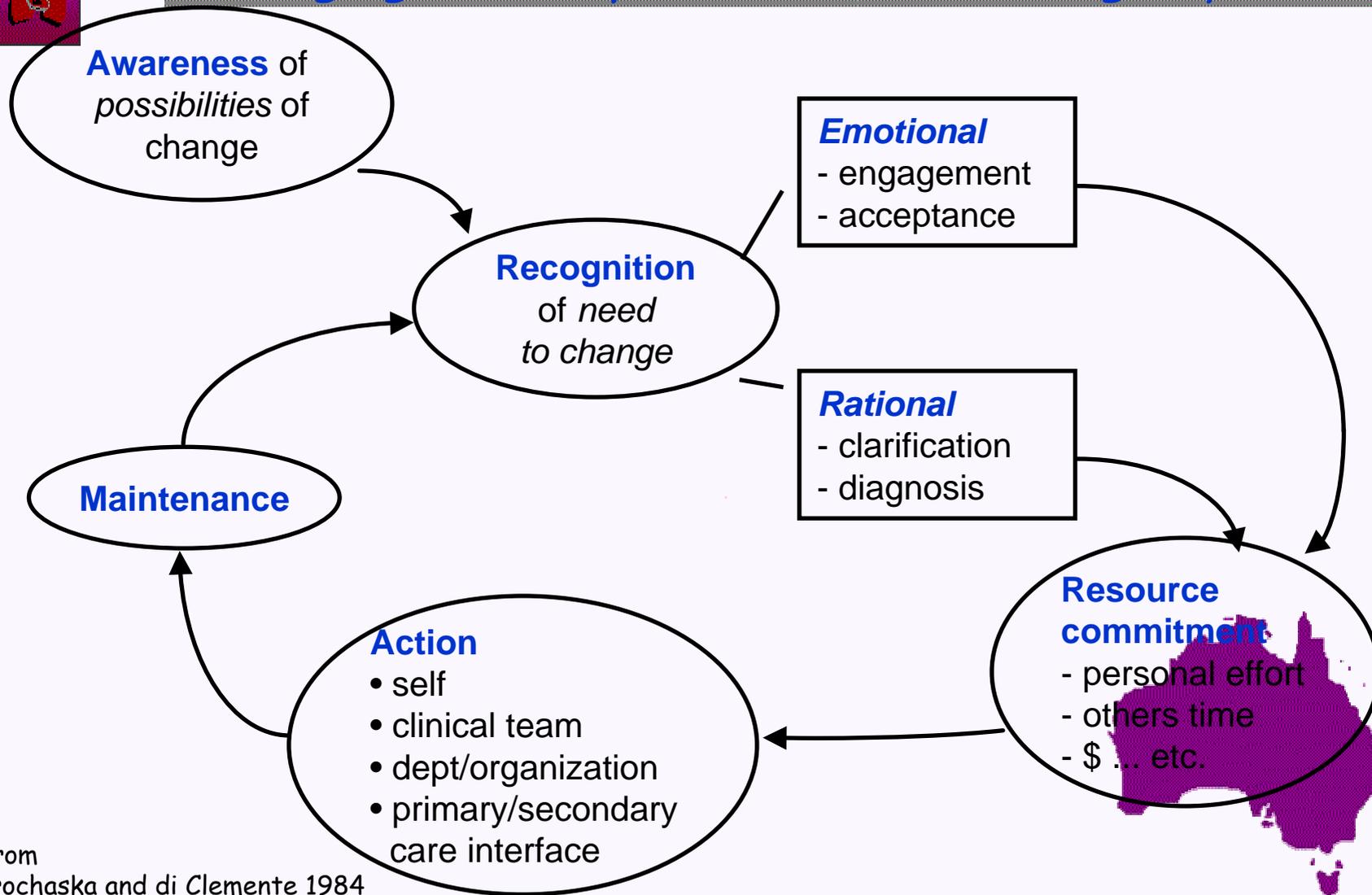
Restrainers

- to maximize chance of change, resolve, reduce or dissolve pressures against forward movement
- *Don't react to emotion with logic*
- Consider forces acting inside self, in groups and relationships and at an organizational, social and 'political' environment





Changing clinical practice - a multi staged process



From
Prochaska and di Clemente 1984
The transtheoretical approach



Bottom Line:

“guideline development and implementation methods should be *theory driven* and *evidence based* (supported by evidence that proves the theory correct).”



Smith WR. Evidence for the effectiveness of techniques to change physician behavior.
Chest 2000;118(2) Suppl :8S-17S



Translating guidelines into practice

Properties of guidelines that make them more likely to be adopted:

- the new practice can be demonstrated to be superior to the old practice
 - higher the level of evidence, more likely to adopt



Davis DA and Taylor-Vaisey AT. Translating guidelines into practice: A systematic review of theoretic concepts, practical experience and research evidence in the adoption of clinical practice guidelines. *Can Med Assoc J* 1997;157:408-416



Translating guidelines into practice

Properties of guidelines that make them more likely to be adopted:

- the new practice can be demonstrated to be superior to the old practice
 - higher the level of evidence, more likely to adopt
- the guideline is relatively uncomplicated



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- the guideline is relatively uncomplicated
- parts or all of the guideline can be tried by the clinician with ease
- the clinician can observe others trying the guideline
- the guideline supports existing beliefs



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Translating guidelines into practice

Strategies that have been proven to facilitate implementation of guidelines:

Weak strategies:

- didactic lecture based CME (conferences, lectures)
- unsolicited mail

Moderate strategies:

Relatively strong strategies:



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Moderate strategies:

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 - especially if timely and delivered by peers or opinion leaders

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Relatively strong strategies:

- reminder systems
- academic detailing
- multiple interventions



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Translating guidelines into practice

Strategies that can be used to implement practice change:

Educational materials

- distribution of published or printed recommendations
- should be 'simple' and easy to understand
- presented in 3 levels
 - overview, summary and detailed



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

- participation in conferences, lectures, workshops or traineeships



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

Local consensus process

- inclusion of local providers in discussion to ensure that they agree that the chosen clinical problem is important and the approach to management is appropriate



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

Local consensus process

Educational outreach process

- use of a 'trained person' who meets with providers in their practice setting to provide information with the intent of changing provider's performance



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

Local consensus process

Educational outreach process

Local opinion leaders

- use of providers nominated by their colleagues as 'educationally influential'
 - the 'opinion leaders' must be identified by their colleagues



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

Local consensus process

Educational outreach process

Local opinion leaders

Patient-mediated interventions

- any intervention aimed at changing provider's behavior where specific information is sought from or given to patients (or their families)



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

Local consensus process

Educational outreach process

Local opinion leaders

Patient-mediated interventions

Audit and feedback

- any summary of clinical performance over a specified time period
- may be provided in verbal or written format



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

Local consensus process

Educational outreach process

Local opinion leaders

Patient-mediated interventions

Audit and feedback

Reminders (manual or computerized)

- an intervention that prompts the provider to perform a patient or encounter-specific clinical action



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Translating guidelines into practice

Strategies that can be used to implement practice change :

Educational materials

Conferences

Local consensus process

Educational outreach process

Local opinion leaders

Patient-mediated interventions

Audit and feedback

Reminders (manual or computerized)

Multifaceted interventions

- two or more of the above



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;39(8) Suppl 2:II-2-II-45.



So... What are we going to do???

Everything!!!!





So... What are we going to do???

Multifaceted interventions

- two or more of the above





So... What are we going to do???

Multifaceted interventions

- two or more of the above

didactic lecture based CME
(the same as you would do for any guidelines
based practice change in your unit)





Guideline properties

- The methodology used to develop the guideline is evidence-based. Recommendations are made *only* where there is valid supporting evidence.
- Individual decision making is preserved in areas where evidence is weak, outcomes are not validated or uncertainty exists.





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Guideline properties

- The guideline will be presented in printed form in 3 levels:
 - 1) uncomplicated algorithmic form
 - 2) formatted, brief summaries of evidence supporting decision points
 - 3) comprehensive binder of all supporting evidence





Guideline properties

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 - 3) comprehensive binder of all supporting evidence
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Guideline properties

- In getting people to *try* the guideline, we will emphasize a sequential approach, NOT an all or none.





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Guideline properties

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At ICU admission:
Should this patient be fed?

yes

Can EN be
started within 24 hours?

yes

GASTRIC CHALLENGE

- use full strength concentration
- consider prokinetic with challenge
- GOAL: at least 80% of requirements at 72h
- assess q12h



no

~~Continue EN to Max. tolerated
Supplement with PN
Continue EN challenges q12h~~

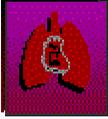


Guideline properties

- In getting people to *try* the guideline, we will emphasize a sequential approach, NOT an all or none.
- The guideline will be presented in printed form in 3 levels:
 - 1) uncomplicated algorithmic form
 - 2) formatted, brief summaries of evidence supporting decision points
 - 3) comprehensive binder of all supporting evidence
- *parts or all of the guideline can be tried by the clinician with ease*



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Guideline properties

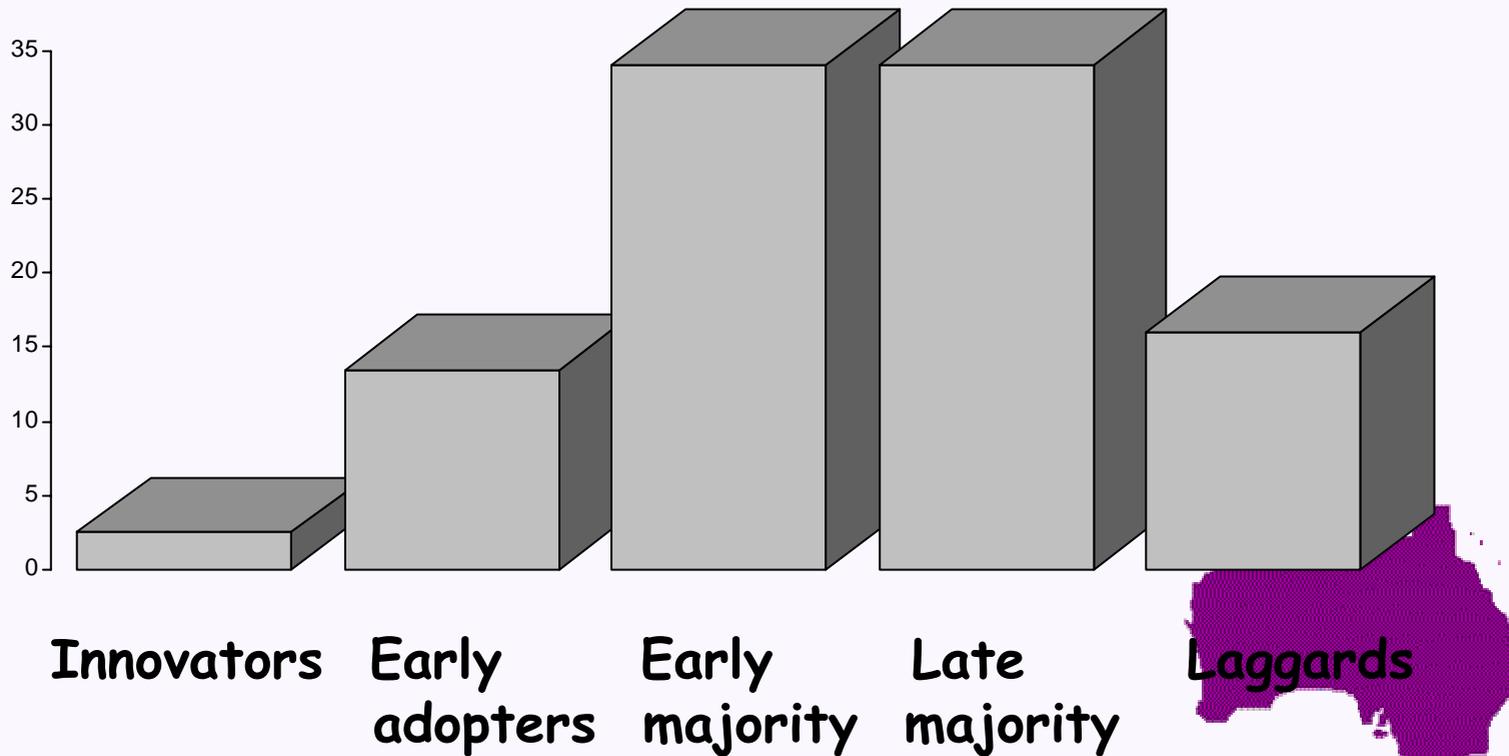
Look for innovators / early adopters (Local Champion, Opinion Leader).





Guideline properties

Look for innovators / early adopters (Local Champion, Opinion Leader).

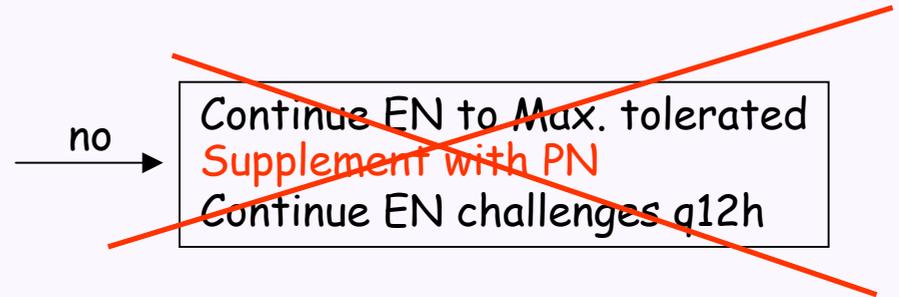


From: Rogers EM. Diffusion of innovations. 4th ed. New York: Free Press, 1995.



Guideline properties

Look for innovators / early adopters (Local Champion, Opinion Leader).





Guideline properties

Look for innovators / early adopters (Local Champion, Opinion Leader).



no →

Continue EN to Max. tolerated
Supplement with PN
Continue EN challenges q12h

- *the clinician can observe others trying the guideline*



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Guideline properties

You *will* be able to identify potential innovators / early adopters (Local Champion, Opinion Leader).

Start with them.....





Guideline properties

You *will* be able to identify potential innovators / early adopters (Local Champion, Opinion Leader).

Start with them.....

- *the guideline supports existing beliefs*



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Specific Implementation Strategy

- 1) Academic detailing
- 2) Educationally influential opinion leaders
- 3) Local consensus process
 - local champions
- 4) Reminders (manual or computerized)
 - active ongoing bedside reminder system
 - patient-mediated interventions
 - educational materials
- 5) Audit and feedback
 - computer generated, timely
 - should be delivered by peers or opinion leaders
- 6) Educational outreach process
 - didactic lecture based CME (conferences, lectures)
- 7) Unsolicited mail
 - educational materials





1) Academic Detailing

- the single most powerful way to change physician practice patterns
- employed by the pharmaceutical industry
- most powerful when conducted *peer to peer*
 - *opinion leader, local champion*
- *very* powerful when conducted by allied health professionals

Gross PA and Pujat D. Implementing practice guidelines for appropriate antimicrobial usage. *Med Care* 2001;**39**: II-55-II69





1) Academic Detailing

"short, **one-to-one** conversations between a detailer and a practitioner with the goal of persuading the detailee to change behavior through useful information and evidence"

Gross PA and Pujat D. Implementing practice guidelines for appropriate antimicrobial usage. *Med Care* 2001;**39**: II-55-II69





1) Academic Detailing

"short, **one-to-one** conversations between a detailer and a practitioner with the goal of persuading the detailee to change behavior through useful information and evidence"

characterized by:

- individual contact
- use of visually attractive material focused on a specific clinical circumstance
- presentation of evidence and rationale in very interactive sessions
- addresses specific concerns, both rational and nonscientific (i.e. attitudes, beliefs, values) known to be delaying adoption

Gross PA and Pujat D. Implementing practice guidelines for appropriate antimicrobial usage. *Med Care* 2001;**39**: II-55-II69

Borbas C, Morris N, McLaughlin B et al. The role of clinical opinion leaders in guideline implementation and quality improvement. *Chest* 2000;**118**(2) Suppl:24S-32S



1) Academic Detailing

Relies upon the clinical detailer to offer:

- their expertise and experience in a face-to-face meeting that encourages interactive learning
- credible information in a user-friendly, concise manner with repetition of only a few major points
- an understanding of the practice setting and environment in which individual physicians practice
- and to some degree, an implicit bond of shared beliefs and attitudes

Borbias C, Morris N, McLaughlin B et al. The role of clinical opinion leaders in guideline implementation and quality improvement. *Chest* 2000;**118**(2) Suppl:24S-32S





2) Educationally influential opinion leaders

Possess 3 key characteristics:

- knowledge
 - they are current and up to date
 - they demonstrate a high level of expertise
- communication
 - they enjoy and are willing to share knowledge
 - they never seem to be too busy to be helpful
 - they offer clear and practical information
- humanism
 - they are caring physicians
 - they never 'talk down to' their colleagues



Borbas C, Morris N, McLaughlin B et al. The role of clinical opinion leaders in guideline implementation and quality improvement. *Chest* 2000;118(2) Suppl:24S-32S



2) Educationally influential opinion leaders

Possess 3 key characteristics:

- knowledge
- communication
- humanism

"the 'opinion leaders' must be identified by their colleagues"



Grimshaw JM, Shirran L, Thomas R et al. Changing provider behavior: An overview of systematic reviews of interventions. *Med Care* 2001;**39**(8) Suppl 2:II-2-II-45.



2) Educationally influential opinion leaders

National level guideline produced in 1986 to address indications for cesarean section.

RCT of 76 physicians in 16 hospitals.

- 8 hospitals randomly allocated to control
- 4 hospitals received audit and feedback
- 4 hospitals received Opinion Leader Education

Primary outcome: physicians' rates for trial of labor and for vaginal birth over 24 month follow-up period



Lomas J, Enkin M, Anderson GM et al. Opinion leaders vs. audit and feedback to implement practice guidelines: Delivery after previous cesarean section. *JAMA* 1991;265:2202-2207



2) Educationally influential opinion leaders

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RCT of 76 physicians in 16 hospitals.

- 8 hospitals randomly allocated to control
- 4 hospitals received audit and feedback
- 4 hospitals received Opinion Leader Education

Primary outcome: physicians' rates for trial of labor and for vaginal birth over 24 month follow-up period

Results: Compared to controls, trial of labor and vaginal birth rates were significantly higher in OLE hospitals (46% increase, $p=0.007$ and 85% increase, $p=0.003$).

Lomas J, Enkin M, Anderson GM et al. Opinion leaders vs. audit and feedback to implement practice guidelines: Delivery after previous cesarean section. *JAMA* 1991;265:2202-2207



2) Educationally influential opinion leaders

Hiss OL identification instrument:

Paragraph A

They convey information in such a fashion as to provide a learning experience. They express themselves clearly and to the point -- provide practical information first and then an explanation or rationale if time allows. They take the time to answer you completely and do not leave you with the feeling that they were too busy to answer your inquiry. They enjoy and are willing to share any knowledge they have.

<asked to list three names>

Paragraph B

They are individuals who like to teach. They are current and up to date and demonstrate a command of medical knowledge. They demonstrate a high level of clinical expertise.

<asked to list three names>

Paragraph C

They are "caring physicians" who demonstrate a high level of humanistic concern. They never talk down to you; they treat you as an equal even though it's clear they are helping you.

<asked to list three names>

Hiss RG, Macdonald R and Davis WK. Identification of physician educational influentials (EI's) in small community hospitals. *Proceedings of the 17th Annual Conference on Research in Medical Education* 1978:283-288.





2) Educationally influential opinion leaders

The **Hiss instrument** will be administered to:

- all ICU staff specialists
- a representative sample of staff surgeons admitting patients to the study ICU (up to 20)
- a representative sample of ICU nurses working in the study ICU (25 representative nurses)

Named individuals will be awarded 3 points for a first place nomination in each category, 2 points for a second place nomination and one point for a third place nomination.

The individual ICU staff specialist, staff surgeon and ICU nurse with the *most points* will be deemed the Hiss Opinion Leader (3 Hiss OLs, one in each field).



2) Educationally influential opinion leaders

Will receive **academic detailing** on the feeding guideline content from the *Intensivist co-investigator*

- best approach would be to provide OLs with an overview (printed copy) of the content of the guideline and ask for their opinion and their help
 - they will likely *ask* for more content (next level of information)
- set up an opportunity for the *Dietitian co-investigator* to meet with the OL

This should provide an opportunity for the *Dietitian co-investigator* to provide **academic detailing** to the *Hiss OL*

- very important to give the OL a chance to *address any concerns* and to obtain their buy-in





3) Local consensus process

Intensive care and dietitian co-investigators play an active role in development of guidelines

Co-investigators adopt a Local Champion role





4) Reminders (manual or computerized)

- 1) Proactive manual reminder system
- 2) Patient-mediated interventions
- 3) Educational materials





4) Reminders (manual or computerized)

1) Proactive manual reminder system

- Study Dietitian co-investigator (Local Champion) screens patients for eligibility twice a day
- when patient who is eligible for feeding guideline is detected, appropriate feeding is initiated
 - may require direct notification of Staff Intensivist that feeding is appropriate
 - if patient is appropriate for guideline and Staff Intensivist declines to feed, undertake opportunity for **Academic Detailing** with Staff Intensivist at earliest convenient time
 - non-threatening
 - one-on-one
 - present guidelines material and content
 - address any concerns Staff Intensivist may have
 - » can use examples of other physicians, especially Hiss OL, who are using Guideline
 - » suggest Staff Intensivist talk to other physicians using guideline, especially Hiss OL





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 - may require direct notification of Staff Intensivist that feeding is appropriate
 - if patient is appropriate for guideline and Staff Intensivist declines to feed, undertake opportunity for Academic Detailing with Staff Intensivist at earliest convenient time
 - if Staff Intensivist is still reluctant, may need to notify Intensivist co-investigator
 - undertake peer-to-peer [academic detailing](#)





4) Reminders (manual or computerized)

1) Proactive manual reminder system

- Study Dietitian co-investigator (Local Champion) screens patients for eligibility twice a day
 - when patient who is eligible for feeding guideline is detected, appropriate feeding is initiated
-
- Remember, only discuss barriers to 2 or 3 major components of the guideline at any one session.
 - Allow people to try parts of the guideline and become comfortable with them.
 - Don't expect everyone to adopt the guideline at the same rate.
 - Set up opportunities for the Laggards to talk to Innovators / Earl Adopters.... *Especially the Hiss OL... one-on-one.*
 - This is probably the *best* way to overcome concerns.



4) Reminders (manual or computerized)

1) Proactive manual reminder system

DL22: If enteral nutrition was stopped for any period longer than 3 hours, select the reason that best describes why feeding was stopped:

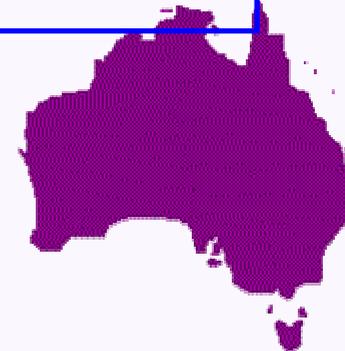
- | | | |
|---|--|--|
| <input type="checkbox"/> a: gastric residuals | <input type="checkbox"/> b: diarrhoea | <input type="checkbox"/> c: vomiting / regurgitation |
| <input type="checkbox"/> d: aspiration pneumonia | <input type="checkbox"/> e: procedure in ICU | <input type="checkbox"/> f: procedure outside ICU |
| <input type="checkbox"/> g: planned extubation | <input type="checkbox"/> h: feeding tube dislodged | <input type="checkbox"/> i: planned / routine stop |
| <input type="checkbox"/> j: blocked tube | <input type="checkbox"/> k: abdominal distension | <input type="checkbox"/> l: other reason |
| <input type="checkbox"/> m: unknown reason / not documented | | |

select only **one**

DL23: Record the maximum / largest gastric residual reported during this feeding day:

mls

not reported / can't aspirate





4) Reminders (manual or computerized)

1) Proactive manual reminder system

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select only **one**

DL23: Record the maximum / largest gastric residual reported during this feeding day:

mls

not reported / can't aspirate

- if feeds stopped due to **diarrhea**, and management was not as per Feeding Guideline, undertake opportunity for **Academic Detailing** with bedside Nurse at earliest convenient time



4) Reminders (manual or computerized)

1) Proactive manual reminder system

- if feeds stopped due to **diarrhea**, and management was not as per Feeding Guideline, undertake opportunity for **Academic Detailing** with bedside Nurse at earliest convenient time
 - non-threatening
 - one-on-one
 - present guidelines material and content
 - address any concerns Nurse may have
 - » can use examples of other nurses, especially Hiss OL, who are using Guideline approach to diarrhea resolution
 - » suggest Nurse talk to other Nurses using guideline, especially Hiss OL





4) Reminders (manual or computerized)

1) Proactive manual reminder system

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| <input type="checkbox"/> m: unknown reason / not documented | | |

select only one

DL23: Record the maximum / largest gastric residual reported during this feeding day:

mls

not reported / can't aspirate

- if feeds stopped due to **Gastric Residual < 200ml**, and management was not as per Feeding Guideline, undertake opportunity for **Academic Detailing** with bedside Nurse at earliest convenient time



4) Reminders (manual or computerized)

1) Proactive manual reminder system

- if feeds stopped due to **Gastric Residual** < 200ml, and management was not as per Feeding Guideline, undertake opportunity for **Academic Detailing** with bedside Nurse at earliest convenient time
 - non-threatening
 - one-on-one
 - present guidelines material and content
 - address any concerns Nurse may have
 - » can use examples of other nurses, especially Hiss OL, who are using Guideline approach
 - » suggest Nurse talk to other Nurses using guideline, especially Hiss OL





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|---|--|--|
| <input type="checkbox"/> a: gastric residuals | <input type="checkbox"/> b: diarrhoea | <input type="checkbox"/> c: vomiting / regurgitation |
| <input type="checkbox"/> d: aspiration pneumonia | <input type="checkbox"/> e: procedure in ICU | <input type="checkbox"/> f: procedure outside ICU |
| <input type="checkbox"/> g: planned extubation | <input type="checkbox"/> h: feeding tube dislodged | <input type="checkbox"/> i: planned / routine stop |
| <input type="checkbox"/> j: blocked tube | <input type="checkbox"/> k: abdominal distension | <input type="checkbox"/> l: other reason |
| <input type="checkbox"/> m: unknown reason / not documented | | |

select only **one**

DL23: Record the maximum / largest gastric residual reported during this feeding day:

mls

not reported / can't aspirate

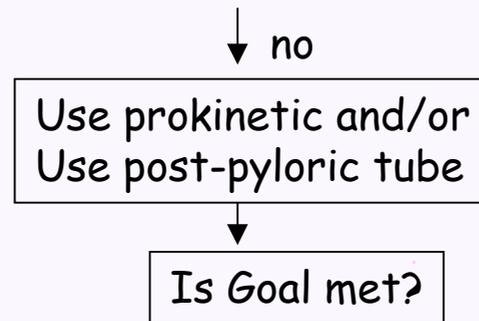
- if feeds stopped due to **Gastric Residual > 200ml**, and management was not as per Feeding Guideline, notify Staff Specialist of appropriate action under guideline



4) Reminders (manual or computerized)

1) Proactive manual reminder system

- if feeds stopped due to **Gastric Residual** > 200ml, and management not as per Feeding Guideline, notify Staff Specialist of appropriate action to be taken under guideline



- ensure appropriate action is initiated
 - if patient is appropriate for guideline and Staff Intensivist declines to feed, undertake opportunity for **Academic Detailing** with Staff Intensivist at earliest convenient time
 - if Staff Intensivist is still reluctant, may need to notify Intensivist co-investigator
 - undertake peer-to-peer **academic detailing**



4) Reminders (manual or computerized)

1) Proactive manual reminder system

2) Patient-mediated interventions

- New Zealand hospitals have been required to place a notification of implementation of the Guideline in the Waiting area.
- Will inform Visitors / Family members of the implementation of a Best Evidence approach to Nutrition in the ICU
- Will encourage Visitors to ask the bedside Nurse, Staff Specialist, member of healthcare team on how their loved one is being fed.





4) Reminders (manual or computerized)

- 1) Proactive manual reminder system
- 2) Patient-mediated interventions
- 3) Educational materials
 - algorithm (and components) will be posted in and around the unit
 - visually attractive, easy to understand format will be used
 - high traffic areas (break room, toilets, halls)
 - laminated version at each bedside
 - in each 'treatment area'
 - 2nd level support material (visually attractive summaries of each decision point) will be made easily accessible in each treatment area





5) Audit and Feedback

Computer-based timely feedback of main process measures.

Will provide for comparison to peer-hospitals.





5) Audit and Feedback

Patient Label or Name and MRN						APACHE II (24 hours post-admit)	ICU Outcome recorded	Hospital outcome recorded	
PW1: Patient Code	Hospital ID	Patient Number	PW2: Patient Initials			PW3: ICU Admit Date			
			PW4: EN start date			PW5: PN start date			
						<input type="checkbox"/> APACHE II	<input type="checkbox"/> ICU Outcome	<input type="checkbox"/> Hospital Outcome	

- Patient Worksheet has been altered to allow recording of PN and EN start date.
- *EN start date*: Date patient first received EN. Record EN start date even if patient received PN first.
- *PN start date*: Date patient first received PN. Do *not* record PN start date if patient received EN first.
- If patient is discharged or dies before ever receiving PN or EN (*never fed anything*), record date of discharge or death under both EN and PN start date.



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DECISION MAKING

An Evidence Based reference site for healthcare decision makers

Journal Club

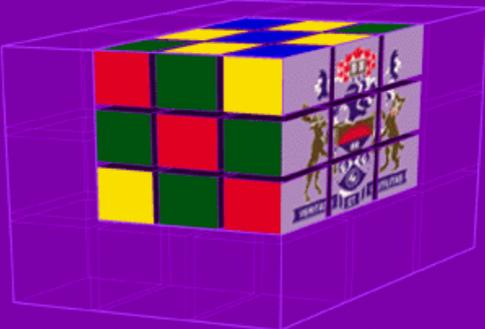
EBRs

Online Education

Evidence Based Links

Nutrition Guidelines

Help



CHSR *f* **CRSS**

Developed with the assistance of a grant from CHSRF.

Site Administrator: **Gordon Doig**

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This page has been accessed 56185 times since January 18 2000
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Your browser is: **Netscape 4.78**

<http://icu-10.med.usyd.edu.au/ebdm/framesetEBL.html>



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Evidence Based Links

Below you will find a compendium of evidence-based links under a variety of medical headings. Should you notice that a link isn't here that you think would be useful to others, please add it in the appropriate category. When you do, your new link should appear after you reload. A built-in feature on this page automatically opens a new browser window everytime you click on one of our links, so that you always quickly jump back to this page.

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●●● OK Site ●●● Well Done Site ●●● Excellent Site**

** Excellent site contains pre-appraised evidence or evidence in a format such that it could be critically appraised

Other [Add a link](#)

- **EB Guidelines Feedback Page** ●●● Edit

NOTE: If you are having problems accessing the secure site with Microsoft Internet Explorer, select **Tools| Internet Options| Advanced**, scroll down to the **Security** section and select **Check for Server Certificate revocation**. Restart Explorer (exit the program and then re-enter). The site should now work.

• **The History of Clinical Trials** ●●●

javascript:showLayer(7)



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Bookmarks Netsite: <https://icu-10.med.usyd.edu.au/um/hys/um.html> What's Related

Secure Data Submission & Feedback

Welcome to the secure data submission and feedback section for the Evidence-based Feeding Guidelines Project.

Please note that your password is unique. All your activities on this site can be tracked via your password.

Select one of the links below

[Data Input](#) [Graphical Feedback](#)

For assistance with this section, contact [Gordon Doig](#) or [Fiona Simpson](#)

WARNING: to maintain security you must close all your browser windows when you are finished (i.e. exit and shut down Netscape or Explorer). If you do not completely shut down your browser after use, other people may have access to your data through the machine you are using.

It is your responsibility to maintain the security of your data within your own hospital.

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Page last modified on Thursday March 31, 2003

Document Done



Feeding Guideline Data Submission Form

Hospital Codes		Reserved		
Hospital ID	<input type="text" value="A1"/>	Patient No.	<input type="text" value="0002"/>	

ICU Feeding Process Measures

ICU Admission date	<input type="text" value="2003"/>	De	<input type="text" value="8"/>
EI start date	<input type="text" value="2003"/>	De	<input type="text" value="8"/>
PI start date	<input type="text"/>	<input type="text"/>	<input type="text"/>

Reset

This will reset ALL the fields be data bmitting

Allmissions are FINAL

your browser in Netscape or ower after use, he machine you are r data within your

[Close this window]

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Document: Done | javascriptvoid(popup('DataInput'))



The screenshot shows a Netscape browser window with a 'Feeding Guideline Data Submission Form' and a 'DATE OF FEEDING' help popup.

Feeding Guideline Data Submission Form

Hospital Codes

Hospital ID	A1	Patient No.	0002	Reserv
-------------	----	-------------	------	--------

ICU Feeding Process Measures

ICU Admission date	2003	De	8
EN start date	2003	De	8
PN start date			

Buttons: Reset, Submit

Text: This will reset ALL the fields, Check data before submitting, All submissions are FINAL, [Close this window]

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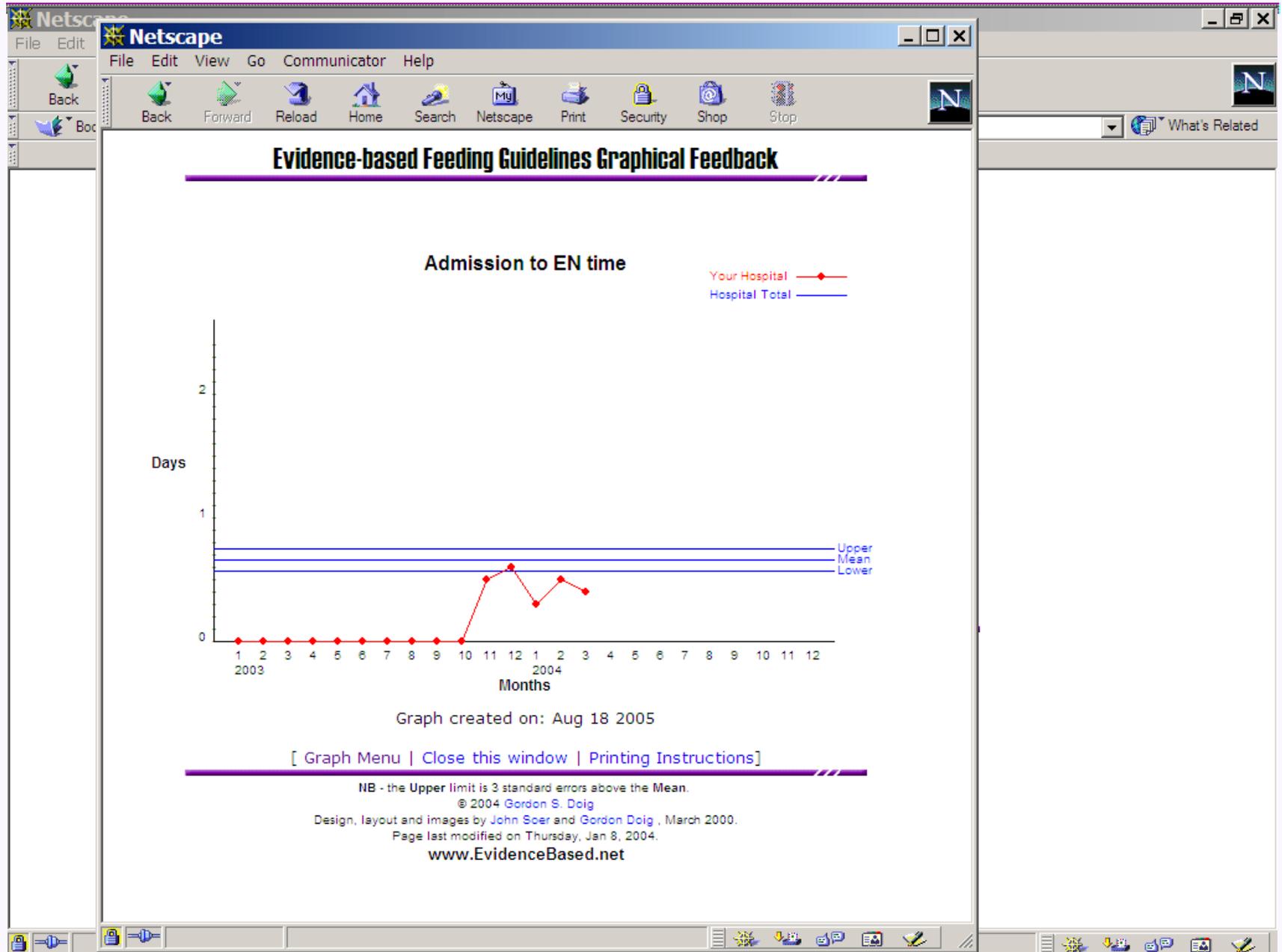
DATE OF FEEDING

Enter the date the patient first received PN. If the patient received EN before receiving PN during this ICU admission, do not record the date of first PN.

Data Entry: The correct format is: yyyy/mm/dd

- use the drop down menu to select the correct date.

Additional Text: In Netscape or... browser after use, the machine you are... data within your... March 2000.





5) Audit and Feedback

If your hospital is an outlier (your mean time is greater than 3 standard errors beyond the mean of all other hospitals):

- use printed graph in *academic detailing* of all Staff Specialists
 - this process works best if done by the Hiss OL
- provide ICU Hiss OL with own copy of graph
- contact Fiona or Gordon if no improvement
- at the request of your Staff Specialists, we will attempt to set up an educational visit from an ICU Hiss OL from a hospital that is achieving very good performance





5) *Audit and Feedback*

If your hospital is performing well, make sure everybody finds out how well you are doing!!!

Congratulate everyone on the great job in implementing the guideline!!!

After this positive reinforcement, may take the opportunity to attention other areas of guideline that you believe can be improved.





6) Educational outreach process

- use of a 'trained person' who meets with providers in their practice setting to provide information with the intent of changing provider's performance
 - prior to implementation, Fiona and I will visit each Guideline hospital to:
 - present the results of the guideline process, content and evidence behind the guidelines in a traditional CME setting
 - ICU, surgical and nursing Hiss OLs should be invited to this meeting
 - may consider presentations by Local Champions / Hiss OLs
 - provide ample time to address any concerns
 - would like to meet with Hiss OLs individually (*academic detailing*)
 - also provides opportunity to address barriers unique to each site





7) *Unsolicited mail*

- visually attractive material will be delivered to all ICU Staff Specialists
- any others deemed important stakeholders by the Local Champions





Summary: Properties of the guideline

Properties of guidelines that make them more likely to be adopted:

- the new practice can be demonstrated to be superior to the old practice
 - higher the level of evidence, more likely to adopt
- the guideline is relatively uncomplicated
- parts or all of the guideline can be tried by the clinician with ease
- the clinician can observe others trying the guideline
- the guideline supports existing beliefs



Davis DA and Taylor-Vaisey AT. Translating guidelines into practice: A systematic review of theoretic concepts, practical experience and research evidence in the adoption of clinical practice guidelines. *Can Med Assoc J* 1997;157:408-416



Summary: Implementation Strategy

- 1) Academic detailing
- 2) Educationally influential opinion leaders
- 3) Local consensus process
 - local champions
- 4) Reminders (manual or computerized)
 - active ongoing bedside reminder system
 - patient-mediated interventions
 - educational materials
- 5) Audit and feedback
 - computer generated, timely
 - should be delivered by peers or opinion leaders
- 6) Educational outreach process
 - didactic lecture based CME (conferences, lectures)
- 7) Unsolicited mail
 - educational materials

