



# Putting evidence into practice:

What we've learned over the last 10 years

November 2005

Bazian.

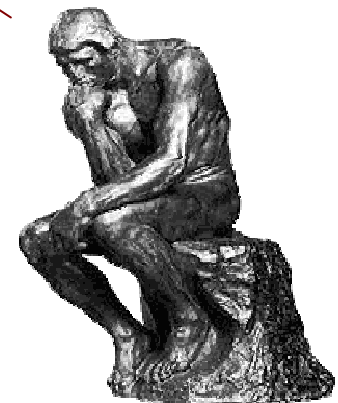
I took the Tardis to 2005 and found this new thing called 'evidence-based healthcare'... only problem is, I can't figure out how to actually use it!

Some doctor  
you are!



# The key questions for figuring out how to actually use evidence-based healthcare (EBHC):

1. Who should be putting evidence into practice?
2. When should evidence be put into practice?
3. What can we learn from the adoption of the X-ray?
4. What *really* has to happen for evidence to be put into practice?





**Question One: Who should be putting evidence into practice?**

What follows is what Dr Charu would have to go through every time he had a medical question in order to become evidence-based on his own

Dr Charu →



Determine if his question is appropriate for an evidence-based approach



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Tightly define the population



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Clearly define the intervention he is interested in

Determine which comparators are valid for his situation





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Search for primary studies

Determine which comparators are valid for his situation

Determine which studies are unreliable or irrelevant

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Tightly define the population

Clearly define the intervention he is interested in

Search for primary studies

Determine which comparators are valid for his situation

Determine which studies are unreliable or irrelevant

Clearly define the outcome he is interested in

Analyse the remaining studies

Clearly define the duration of treatment and time

Write it all up

Figure out the implications for practice

Try to convince others to change



Determine if his question is appropriate for an evidence-based approach

Help!

Tightly define the question

Clearly define the intervention he is interested in

Search for primary studies

Determine which comparators are valid for his situation

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Analyse the remaining studies

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Theoretically, non-specialist doctors and nurses *could* get evidence-based...



... just as they *could* do their own MRI scans



**Get evidence-based!**

A large red-outlined oval thought bubble containing the text 'Get stuffed!'. It is connected to the doctor's head by a series of three smaller red-outlined circles of decreasing size.

Get stuffed!



**Conclusion One: Evidence cannot  
feasibly be put into practice at the  
level of the individual**



Reverend Thomas Bayes  
(whom Bazian is named after)



**Question Two: When should  
evidence be put into practice?**

**Bazian**



# On the 'frontline' it's too late to be asking evidence questions

I wonder what the evidence is for this?  
Oh well, here goes...



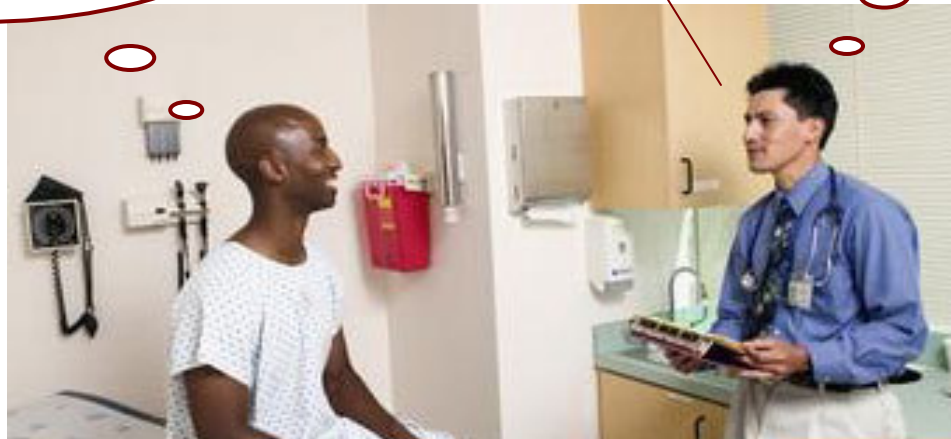
Snip!

# Further, asking evidence questions on the frontline pleases no one (and therefore isn't likely to work)

“Well let’s look at the evidence...”

Shouldn't he already know this? I have to find a new doctor.

I look like an idiot!



**Conclusion Two: For the most part, evidence needs to be put into practice upstream with policy makers, administrators and procurers, leaving practitioners with only good options at their disposal**





**Question Three: What can we learn from the adoption of the X-ray?**

# Wilhelm Röntgen discovers X-rays in 1895



The first ever X-ray: Ms. Röntgen's hand

Eureka!



# ... but not “Eureka” because nobody knew quite what to do with X-rays


Late 1890s:



- There were not enough words for it
- There was institutional resistance
- There were no formal training systems
- There were no protocols or demarcations

# For 'radiology' to become a fully fledged specialty it took...

40 years later:



Hmm... we better have you X-rayed.



- New words
- Scientific and technological innovation
- New equipment and suppliers
- A new specialty – radiology – with specialist practitioners
- New curriculums
- A reorganization of the way we 'see' the human body and diagnose conditions
- New institutions

**Conclusion Three: We are in the early stages of a reorganisation of the way we think about and make medical decisions. It will probably take many more years to complete.**



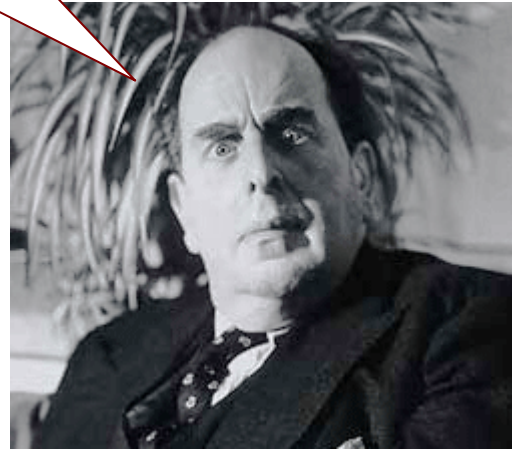




**Question Four: What *really* has to happen for evidence to be put into practice?**

# We need new words

What do you mean  
medicine isn't based on  
'evidence'?



# We need organisations (not just individuals) to commit

I truly want to put evidence into practice



# We need a new specialty



Practitioners



'Evidologists'



Administrators  
and policy makers

# Evidologists' responsibilities

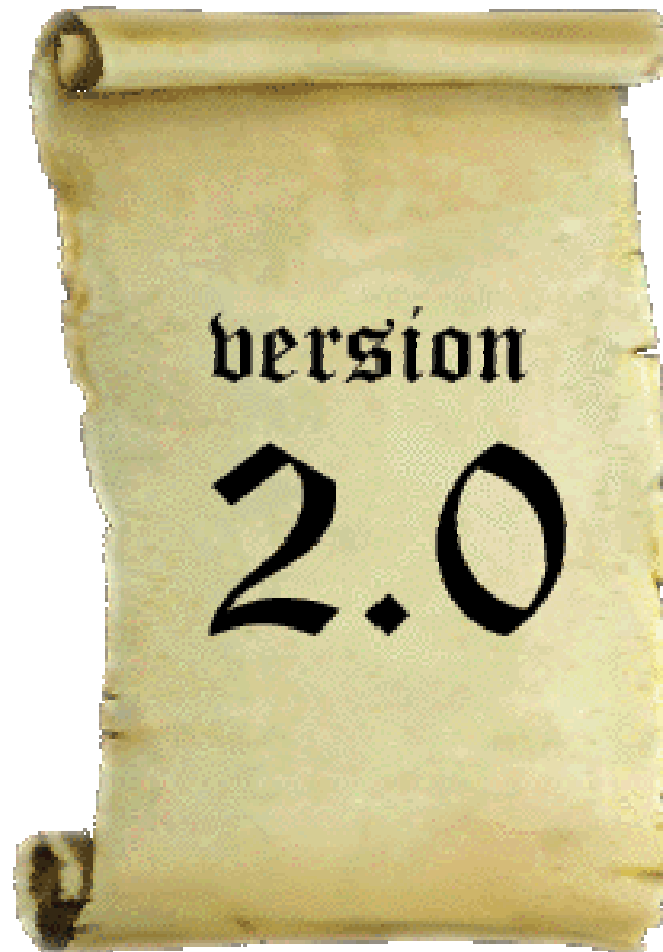


- Identify areas where evidence would help
- Establish protocols for triggering evidence
- Conduct PICOT analyses to set questions
- Locate/commission the appropriate evidence
- Be a resource for practioners (like radiologists are)
- Be a resource for administrators

# We need evidence suppliers



# We need new curriculae



# We need patience







**This transformation of medicine  
sounds awfully painful... is it worth it?**

**Bazian**

# The long and painful process of putting evidence into practice *is* worth it because...

- We are in the business of healing people and evidence helps you figure out the best option
- There really are ‘better’ and ‘worse’ treatments and we need to be able to distinguish between them
- With healthcare costs rising, evidence is the best way to ensure that monies are spent as effectively as possible to deliver the best possible care
- Not choosing an EB approach is to abandon scientific method and make a mockery of research

# ... and EBHC provides a new kind of legitimacy which medicine badly needs

When the hell did patients stop respecting us?... Remember when being a doctor meant that people would look up to you?

Today people think of us as drug-dispensing walking lawsuits who are, in fact, less informed than their internet phones.





**So what can we start doing today?**

**Bazian** 

# Putting evidence into practice right now

- Get your organisation to commit
- Train everyone about what EB is, when it is useful, *and when it isn't*
- Seek out (or develop) in-house evidence experts
- Identify areas in your organisation where evidence could help
- Locate good evidence but don't produce it yourself (evidence is becoming a commodity that is cheaper to purchase than produce)
- Establish and mandate protocols that trigger the question “What is the evidence?” to be asked (and answered)
- Lobby friends, colleagues, governments, and research institutions to embrace EB approaches and change accordingly



Thank you



Bazian