

Next national HAI initiative What should it be?

CAUTI (of course)

Associate Professor Brett Mitchell
Avondale College of Higher Education

Email: brett.Mitchell@Avondale.edu.au

Twitter: @1healthau

Disclosures

- Chair ACICP Scientific Committee
- Editor-in-Chief, Infection Disease and Health
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For those that use Twitter, tweeting information
and links during talk
@1healthau #ACIPC16



Pre-poll



Brett Mitchell

@1healthau

Final session ACIPC conference. Your thoughts before you hear the argument. Next national HAI initiative should be:

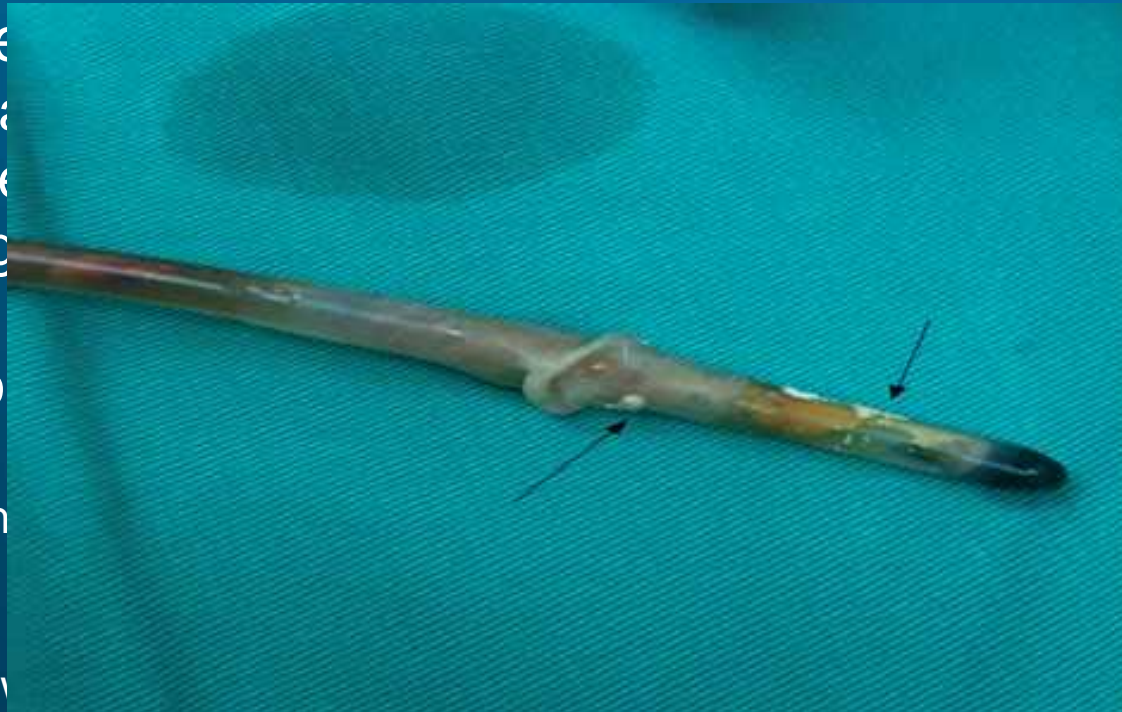
47% Surveillance

47% Vascular device

6% CAUTI

Who would like a UTI / CAUTI?

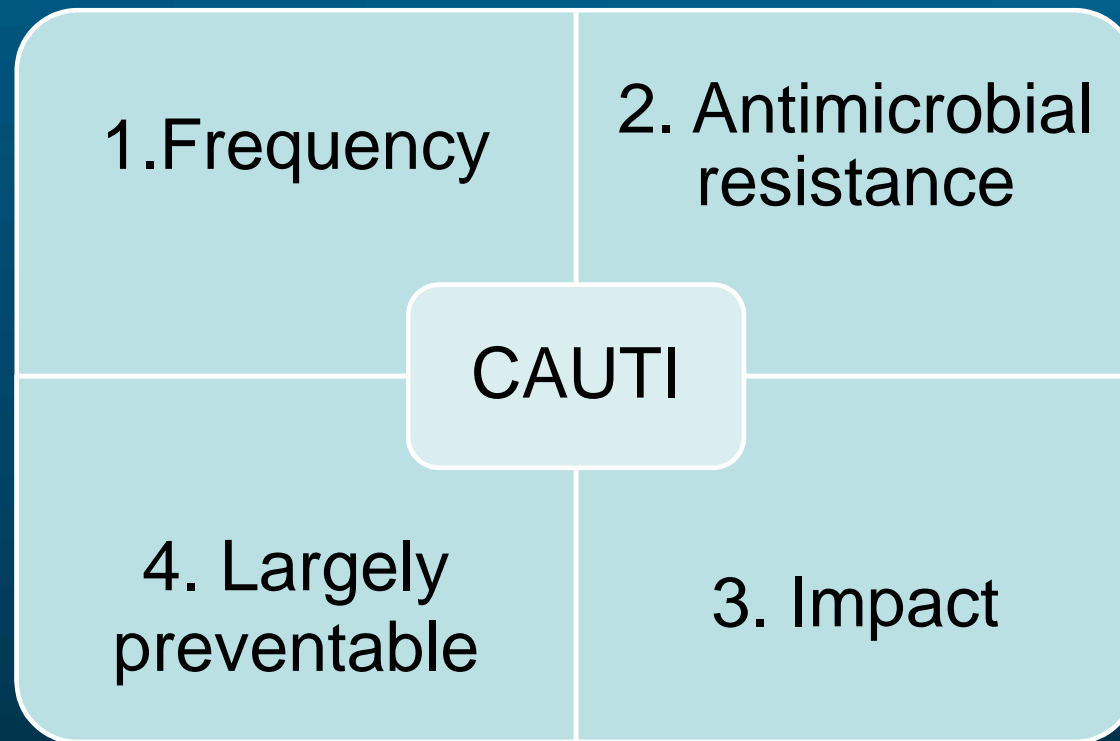
- As a healthcare worker
 - High quality care
 - Avoid wherever possible
 - Don't want high risk
- As a patient/colleague
 - Physical
 - Frequency (n=3)....
 - Emotional
 - Generally uncomfortable
 - n=27



4), stinging

(Leydon et al(2010). *BMJ*, 340, c279)

Why should a CAUTI prevention program be the next national HAI initiative?



Why CAUTI?

1. Frequency



Why CAUTI?

1. Frequency



CAUTI: Frequency

Country/Region`	Author, date	Rank (HA-UTI)
Argentina	Durlach et al, 2012	2
Belgium	Vrijens et al, 2012	1
	Gordts, 2010	1
Canada	Taylor et al, 2016	1
	Gravel et al, 2007	2
Egypt	See et al, 2013	2
Finland	Kanerva et al, 2009	
	Lyytikainen et al, 2008	2
France	Thiolet et al, 2008	1
	Floret et al, 2006	1
	Sartor et al, 2005	1
	French PPS Group, 2000	1

Country	Author	Rank
Greece / Cyprus	Kritsotakis et al, 2008	2
	Gikas et al, 2002	2
Ireland/Northern Ireland	Fitzpatrick et al, 2008	1
Hungary	Caine et al, 2013	
Iran	Lahsaeizadeh et al, 2008	2
Italy	Lanini et al, 2009	2
	Durando et al, 2009	2

(Courtesy Jan Gralton)

CAUTI: Frequency

Australia

- Gardner et al(2014)
 - 6 hospitals
 - HAUTI 1.4% PP, CAUTI 1.4%
- Mitchell et al (2016)
 - 182 acute care facilities
 - HAUTI 1.4% PP
- Mitchell et al (2016)
 - 8 hospital, 162,000+ admissions
 - 1.7% incidence



Extrapolate: 95,000 patient / year acquire HAUTI in Australian hospitals

Why CAUTI?

2. Antimicrobial resistance

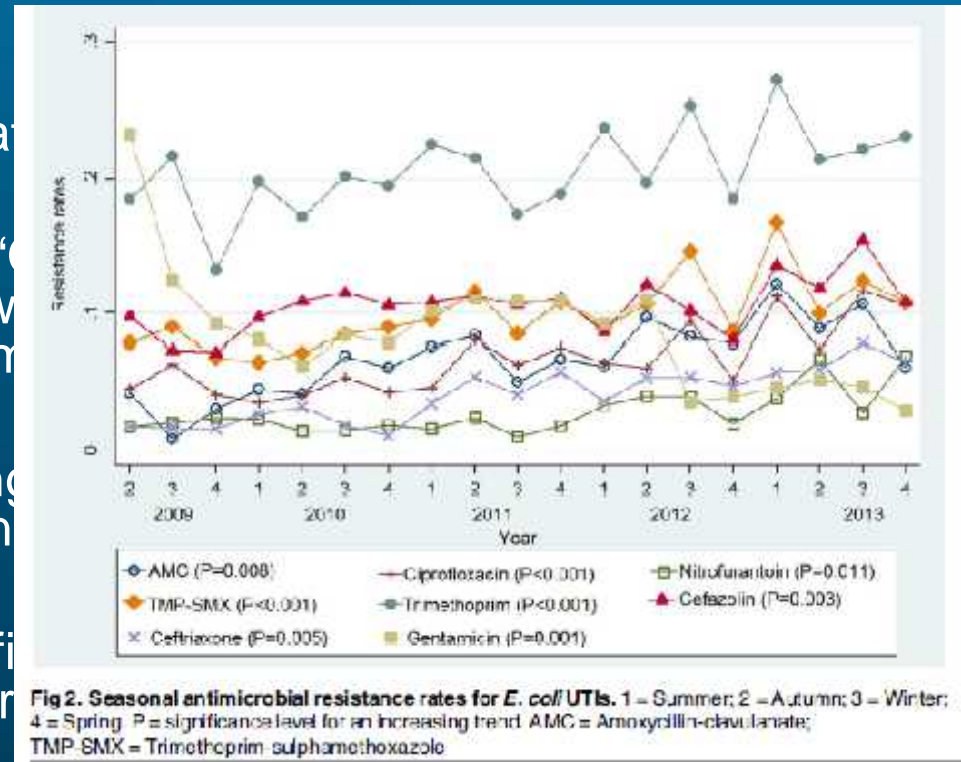
CAUTI: Antimicrobial resistance



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prolong

mortality in patients (World Health Organ

- Antimicrobial resistance has been identified especially in patients with hospital-acquired



As AMR increases, UTIs will become more difficult to treat

Why CAUTI?

3. Impact

CAUTI: Impact

- Morality...complex...probably not at present (but with AMR...)
- Length of stay
 - 8 hospitals, 162K admissions
 - Multi-state modelling
 - HAUTI associated with extra 4 days in hospital (95%CI 3.1-5.0)



380,000 extra bed days in Australia

Why CAUTI?

4. Largely preventable

CAUTI: Largely preventable

- CAUTIs are by their nature associated with urinary catheters
- Large number of catheters are inserted/used catheters
 - 26% of patients admitted to hospitals have urinary catheter inserted (Gardner et al, 2016).
- Catheter use is largely inappropriate
 - Reduction in catheter use ..> reduction in CAUTI
- Evidence to suggest that CAUTI initiatives work

CAUTI: Largely preventable

- Unnecessary catheter use and other strategies (e.g. reminder system, stop order etc) work

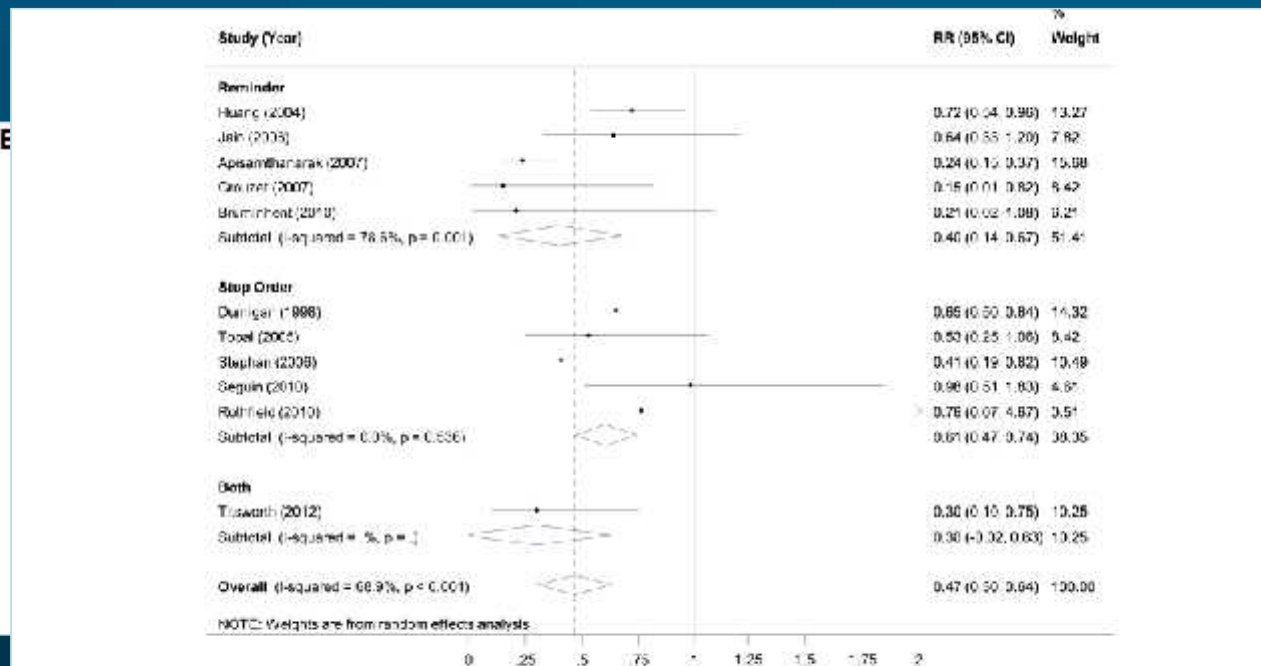


Figure 2 Meta-analysis of rate ratios for catheter-associated urinary tract infection episodes per 1000 catheter days, for intervention versus control groups, stratified by type of intervention to prompt catheter removal.

CAUTI: Largely preventable

- Can be sustained

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Major article

Sustainability of a program for continuous reduction of catheter-associated urinary tract infection

Dejanira A. Regagin RN^a, Debora Schettini da Silva Alves RN^a, Ana Maria Cavalcheiro RN^a, Thiago Zinsly Sampaio Camargo MD^a, Alexandre R. Marra MD^{b,c}, Elvane da Silva Victor PhD^c, Michael B. Edmond MD, MPH, MPA^d

^a Intensive Care Unit, Hospital Israelita Albert Einstein, São Paulo, Brazil
^b Division of Medical Practice, Hospital Israelita Albert Einstein, São Paulo, Brazil
^c Instituto Israelita de Ensino e Pesquisa Albert Einstein, Hospital Israelita Albert Einstein, São Paulo, Brazil
^d Department of Internal Medicine, University of Iowa Carver College of Medicine, Iowa City, IA

Major article

Sustainability of catheter-associated urinary tract infection

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Michael B. Edmond

^a Intensive Care Unit, Hospital Israelita Albert Einstein, São Paulo, Brazil
^b Division of Medical Practice, Hospital Israelita Albert Einstein, São Paulo, Brazil
^c Instituto Israelita de Ensino e Pesquisa Albert Einstein, Hospital Israelita Albert Einstein, São Paulo, Brazil
^d Department of Internal Medicine, University of Iowa Carver College of Medicine, Iowa City, IA

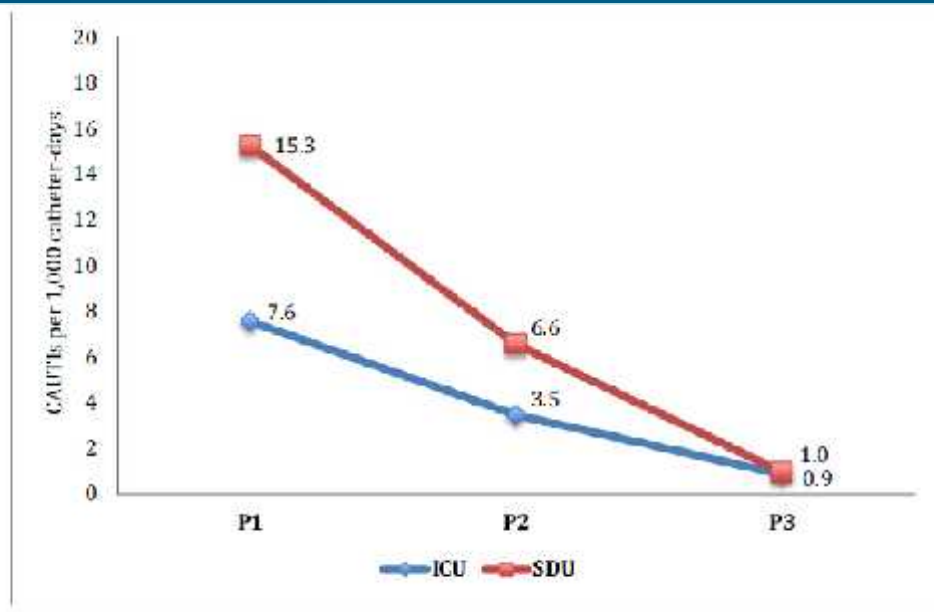


Fig 3. Incidence density of CAUTIs per 1,000 catheter days in the ICUs and SDUs. CAUTI, catheter-associated urinary tract infection; ICU, intensive care unit; P1, phase 1 (June 2005–December 2007); P2, phase 2 (January 2008–June 2013); P3, phase 3 (July 2013–August 2014); SDU, step-down unit.

CAUTI: Largely preventable



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A Program to Prevent Catheter-Associated Urinary Tract
Infection in Acute Care

Among non-ICUs

- catheter use decreased from 20.1% to 18.8% ($P < 0.001$)
- catheter-associated UTI rates decreased from 2.28 to 1.54 infections per 1000 catheter-days ($P < 0.001$)

What could a CAUTI initiative look like?

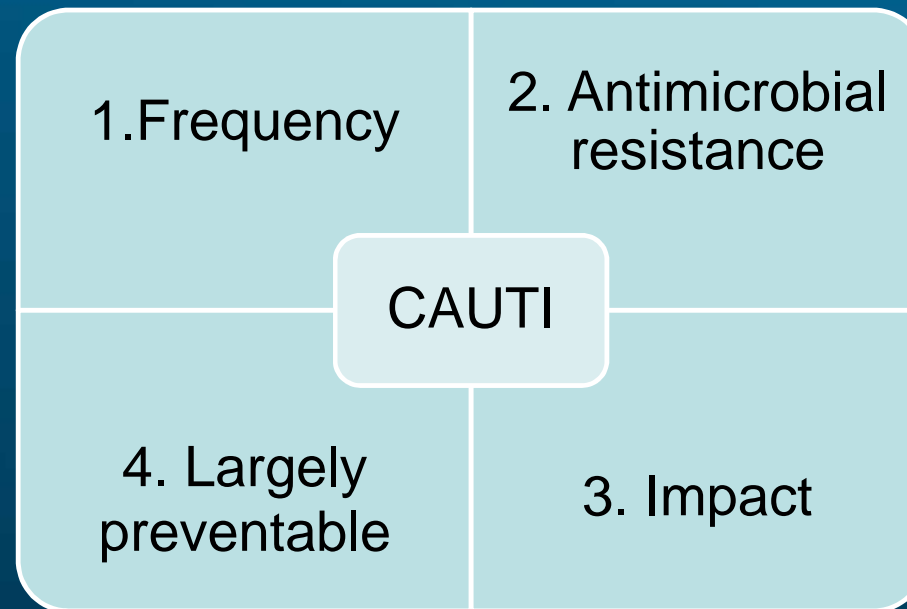
- Look to other models.... NSW, Scotland, US
- Multifaceted programs
- Reduce catheter use
- Correct and standardised insertion
- Early removal
- Surveillance and feedback (you are right Phil, vote for me is a vote for Phil)

One nation, many States (& Territories)

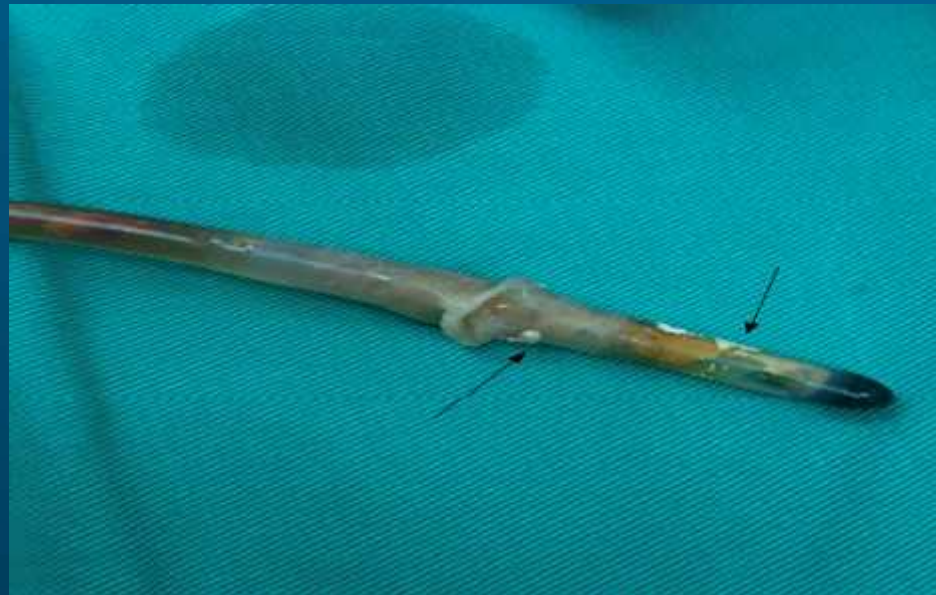
But is possible



Conclusion



Who would like a UTI / CAUTI?



Thank you



What should the next national HAI initiative be?

Discussion and time to vote via app.
Go to program, find this session and vote

Professor Marilyn Cruickshank
(Chair)

Professor Lindsay Grayson, Dr Phil Russo, A/Prof
Brett Mitchell