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Translating evidence into practice

The NSW

Children's Emergency Care Project

Dr Annette Pantle
Director, Clinical Practice Improvement
Projects



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Overview

- ★ What we did
- ★ How we did it
- ★ What we found (results)
- ★ The Sumner-Miller factor (why is this so??)
- ★ What worked
- ★ Where to now ?





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Aim

To make health care safer and more consistent for children and their families presenting to NSW Emergency Departments





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Visits of children to emergency departments are common

- ★ Children have over 1 million visits to Australian emergency departments each year
- ★ In NSW 90% of hospital care of children occurs in emergency departments





Why guidelines for children?



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Children are not small adults –
treatment cannot be merely
“downsized” to suit age and size





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Why an implementation project?

- ★ Existence of guidelines alone is not sufficient to ensure their use in practice
- ★ Gap between evidence & practice





Change management



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- ★ CPI
- ★ Educational outreach
- ★ Barrier-oriented interventions
- ★ Interactive educational interventions
- ★ Multifaceted approach





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Method

- ★ Piloting of 12 Clinical Practice Guidelines
- ★ 53 EDs in pilot project
- ★ Modified collaborative methodology
- ★ Medical record audits
- ★ Formation of multidisciplinary teams





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Measurement

- ★ Quality of documentation
- ★ Specific audit sheets for each guideline
- ★ Sample size
- ★ Case selection
- ★ Benchmarking
- ★ Corrective action





Governance

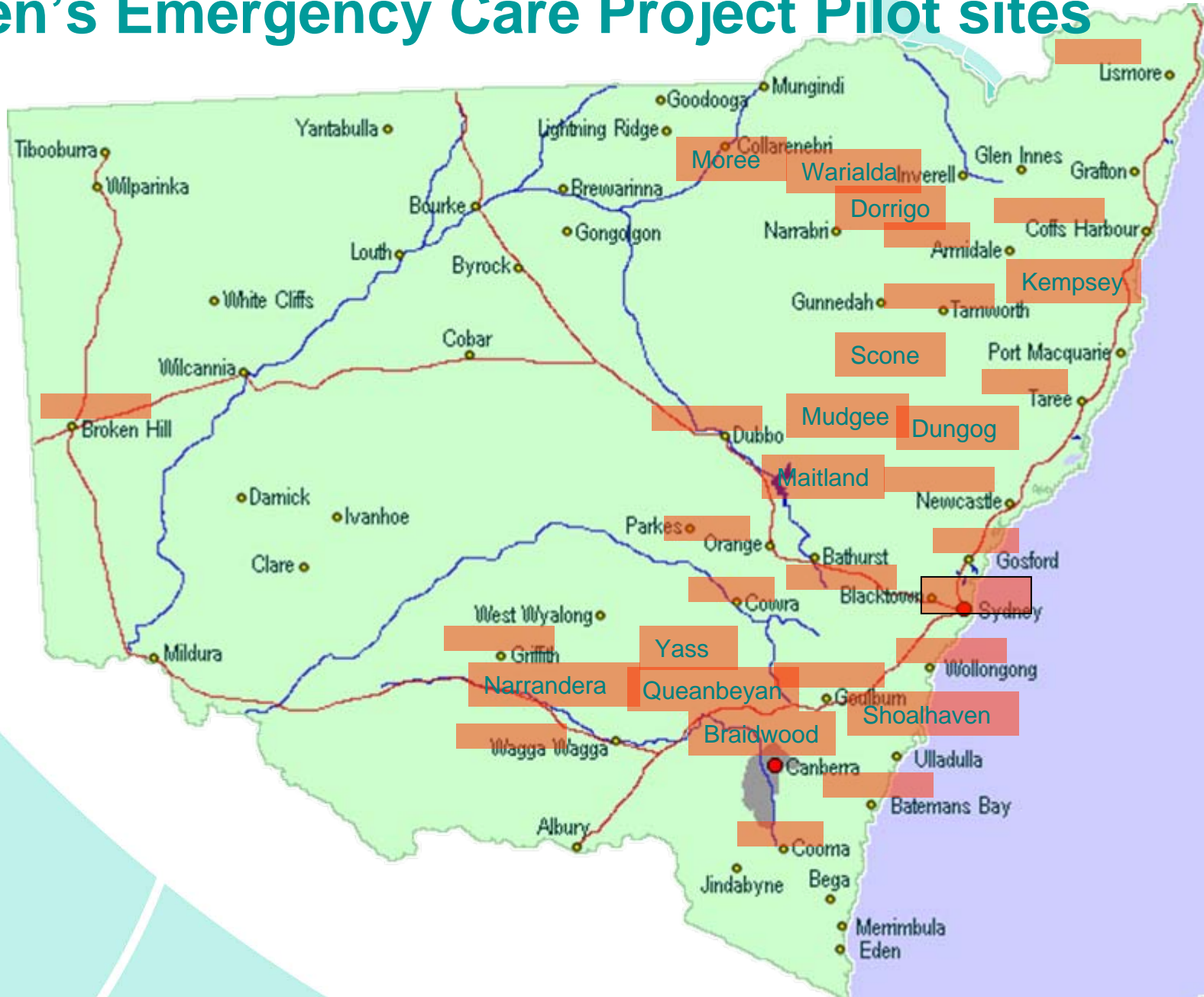


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- ★ CEC
- ★ NSW Department of Health
- ★ The NSW Child Health Networks
- ★ Clinicians across the state
- ★ Project Steering Committee
- ★ Consumers



Children's Emergency Care Project Pilot sites

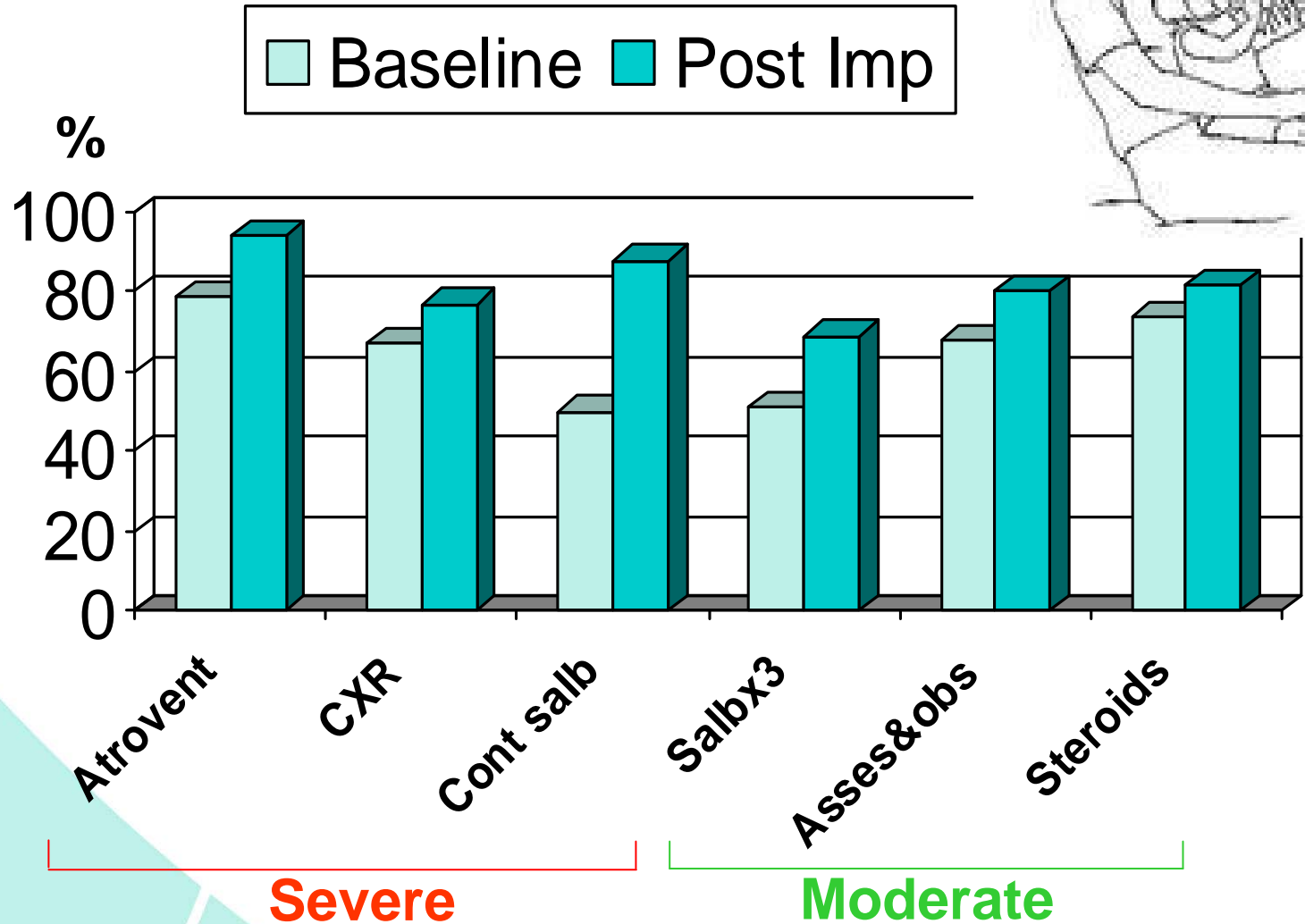


Warialda



22/03/2005

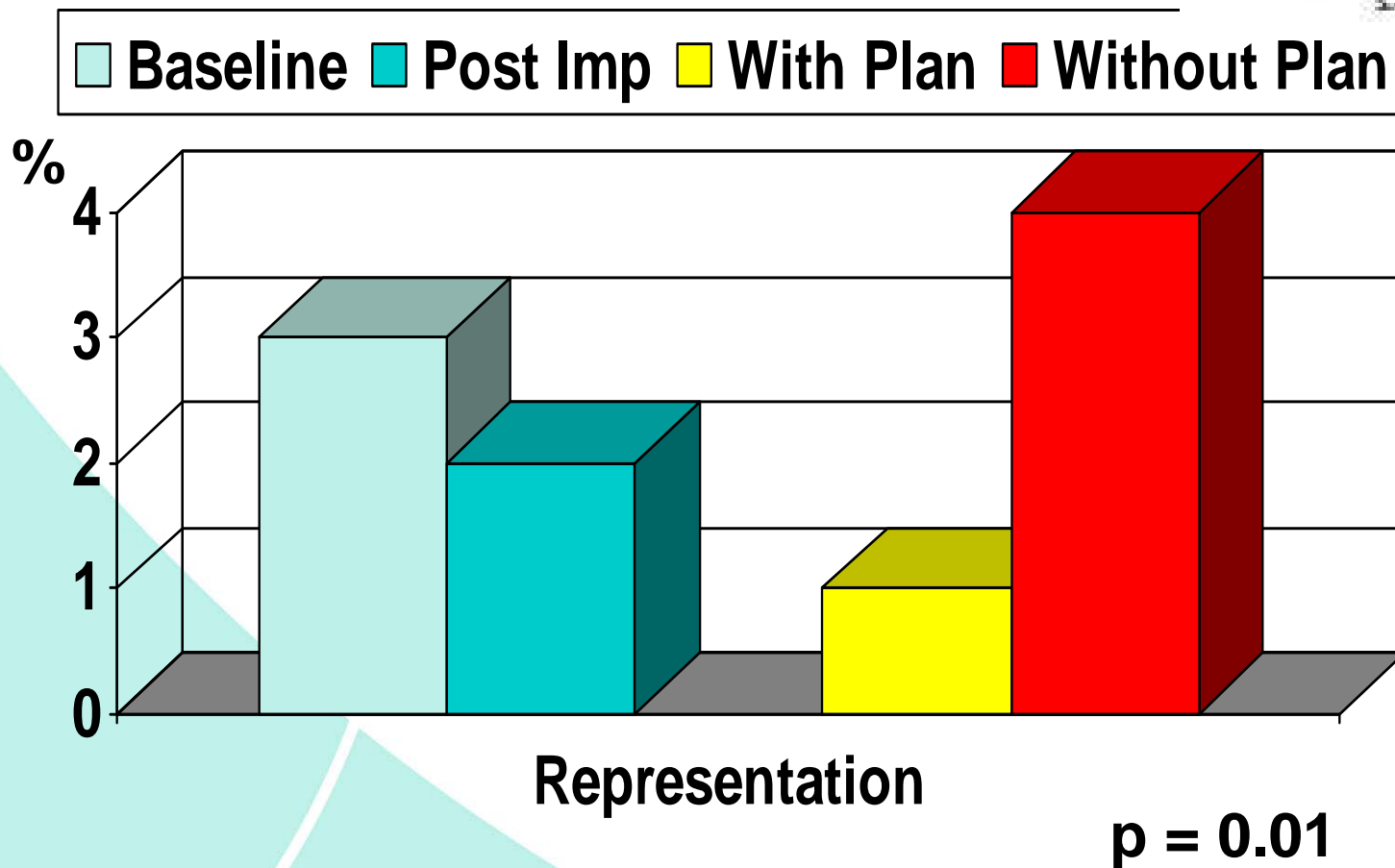
Asthma



Correct use of salbutamol $p=0.04$



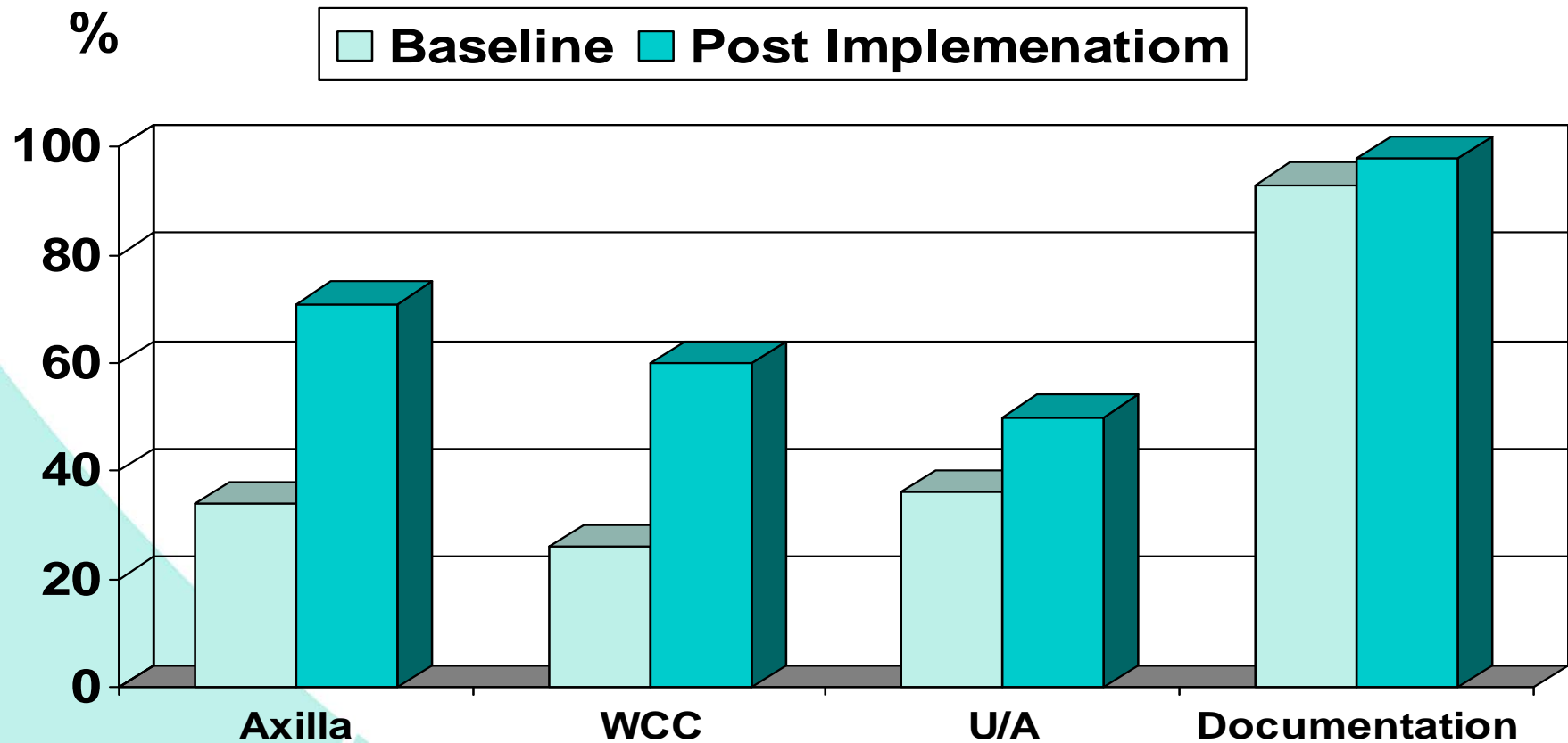
Asthma re-representation rate



Fever less than 3 years



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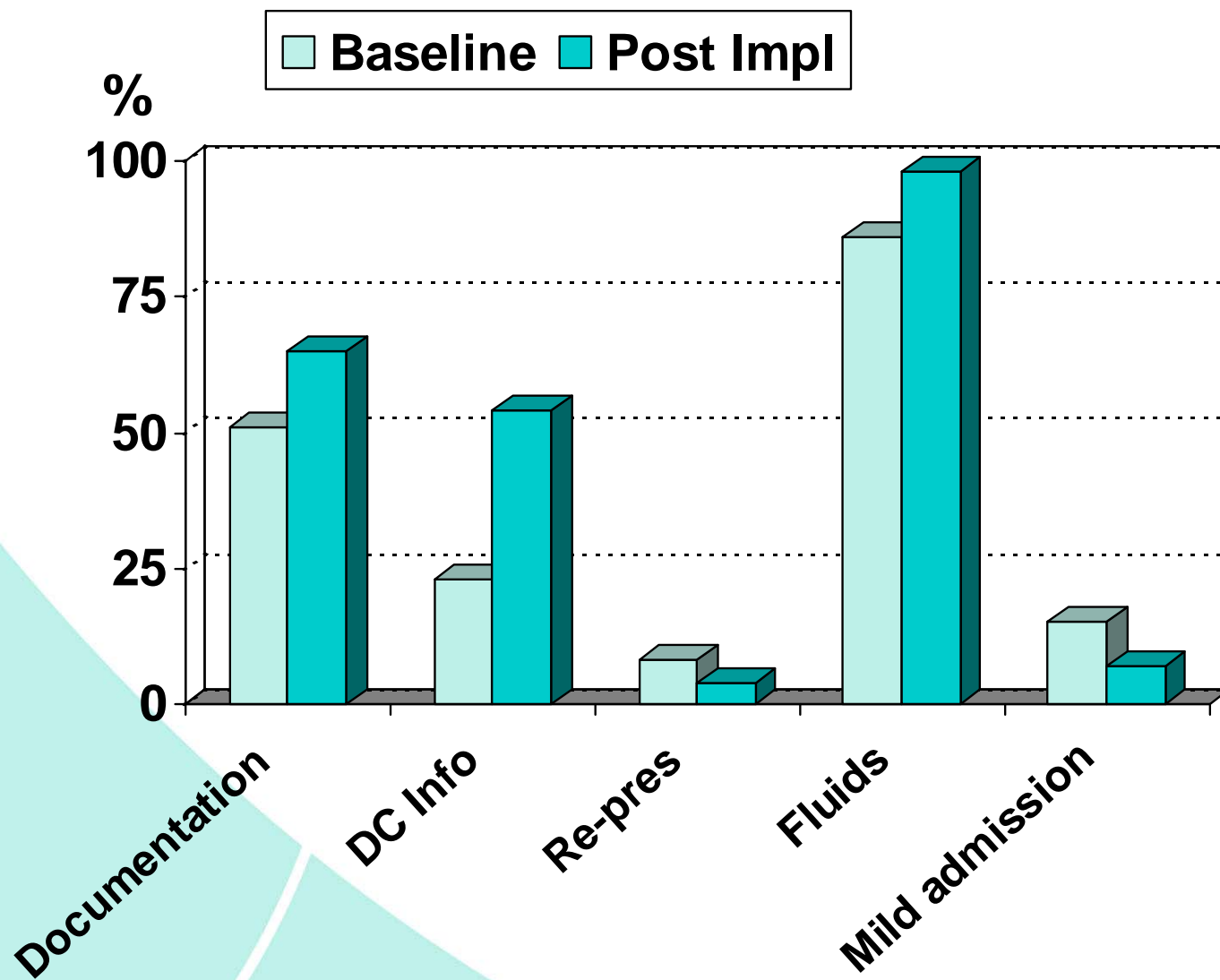




Gastroenteritis



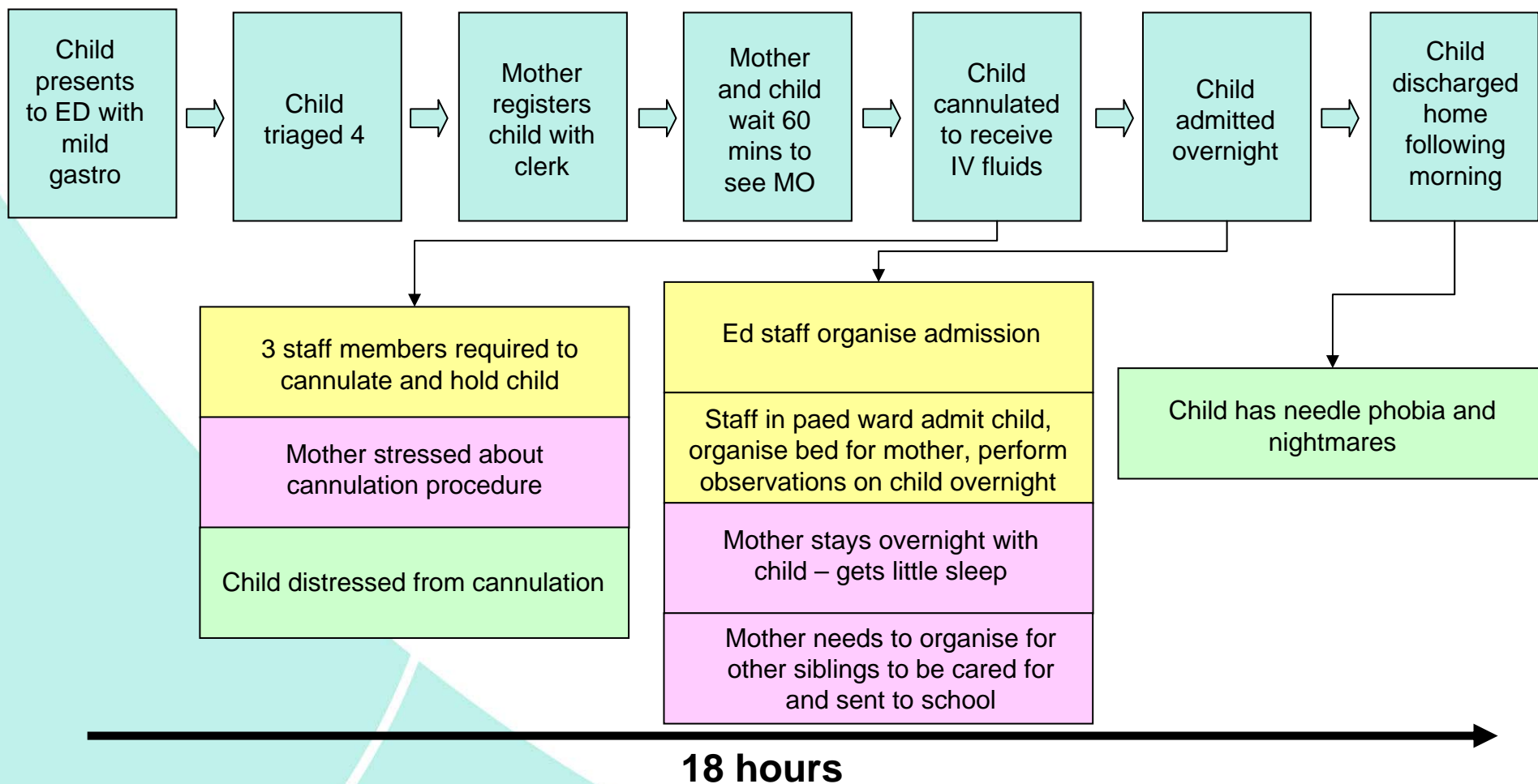
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Child with mild gastro (pre-implementation)



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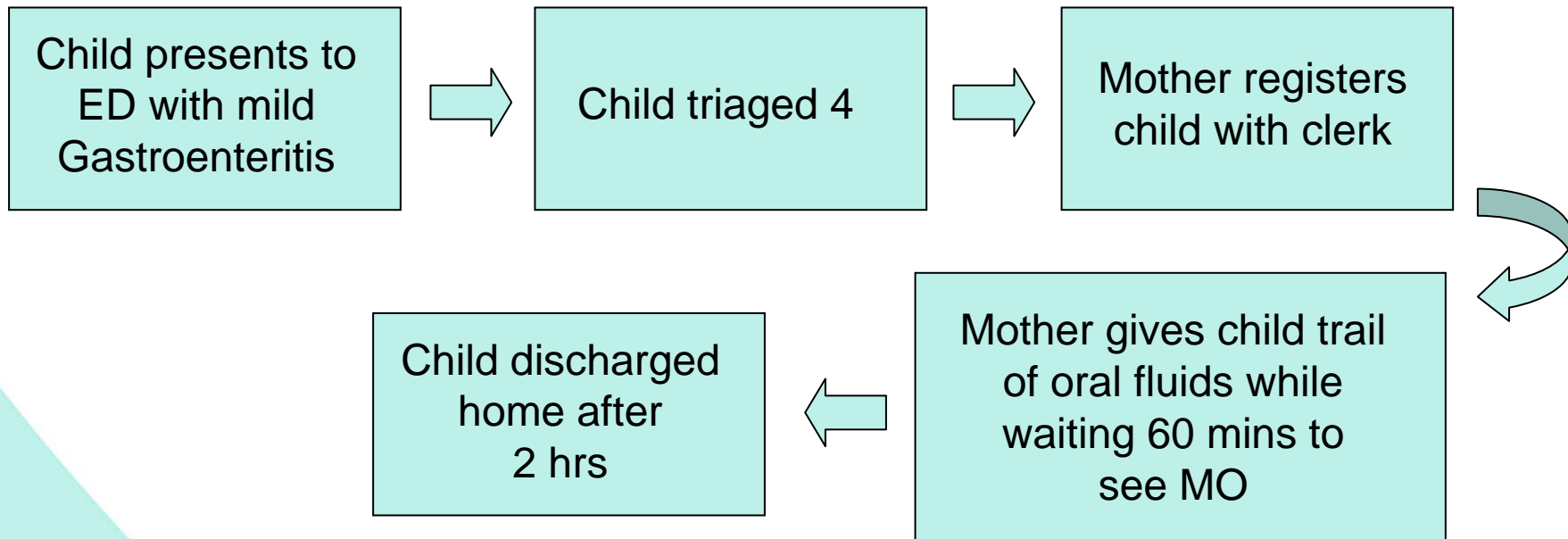




Child with mild gastro (post-implementation)



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Mother understands oral rehydration and uses same when sibling develops gastro; is able to treat at home

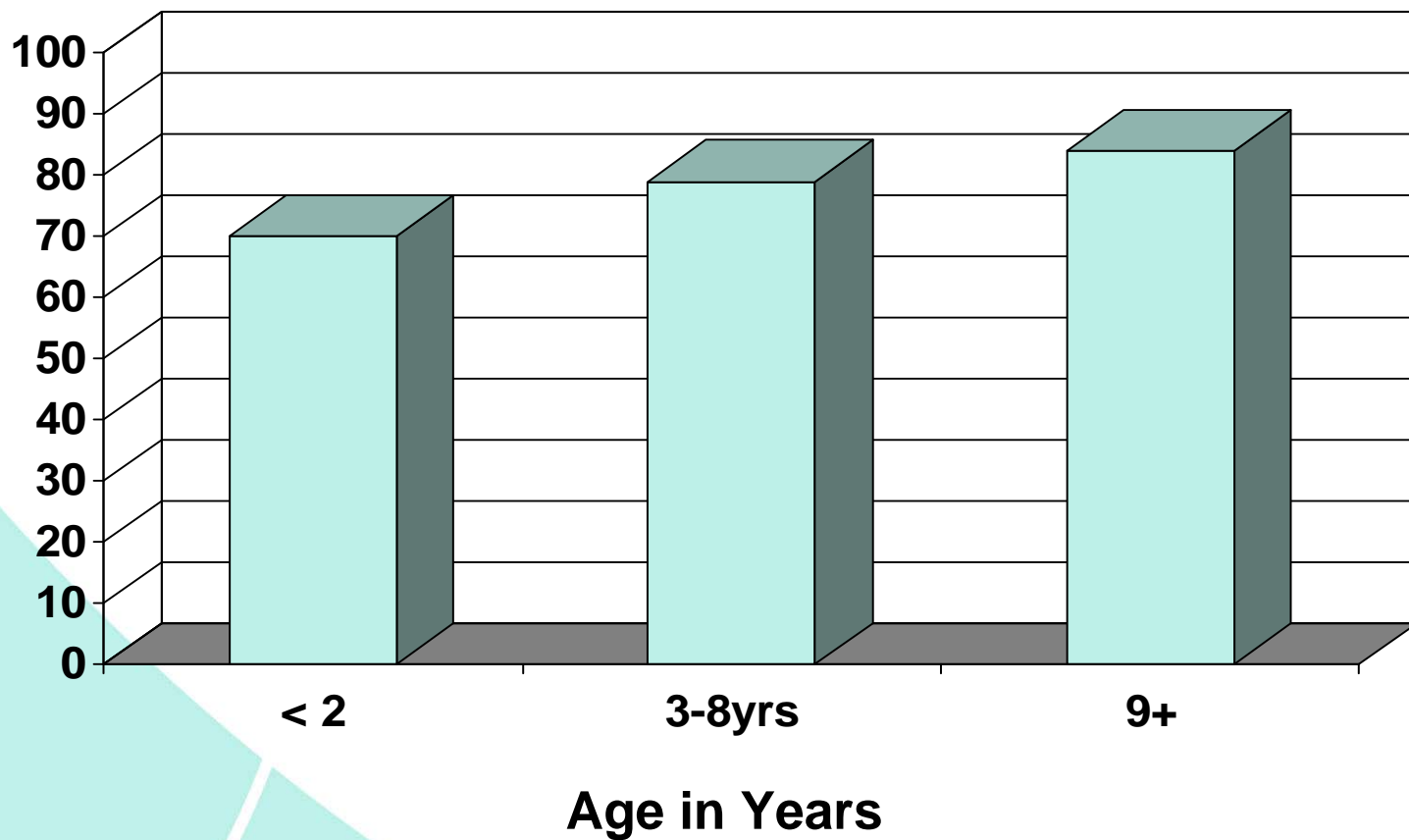
2 hours



Neurological observations Head Injury Guideline pre-implementation



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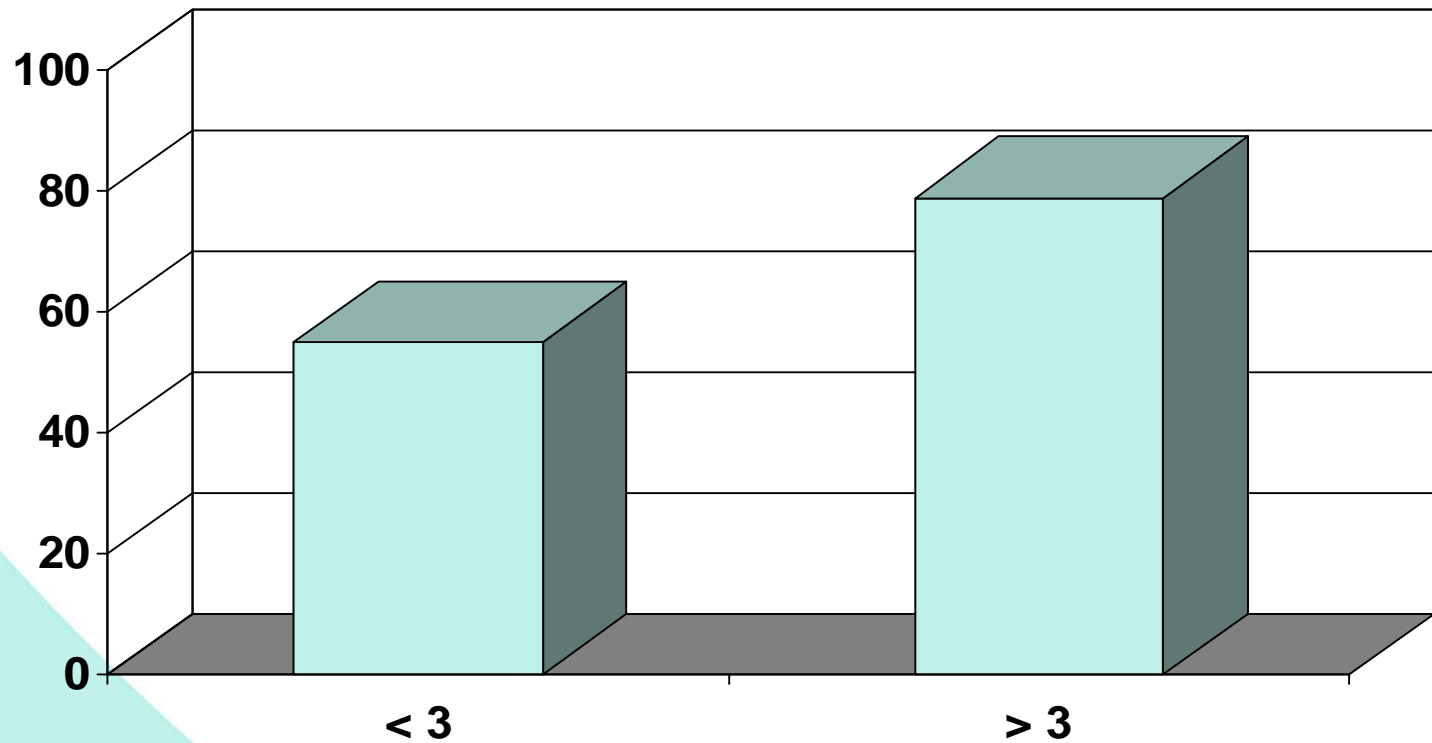




Neurological observations Head Injury - Triage score 3



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Age in Years

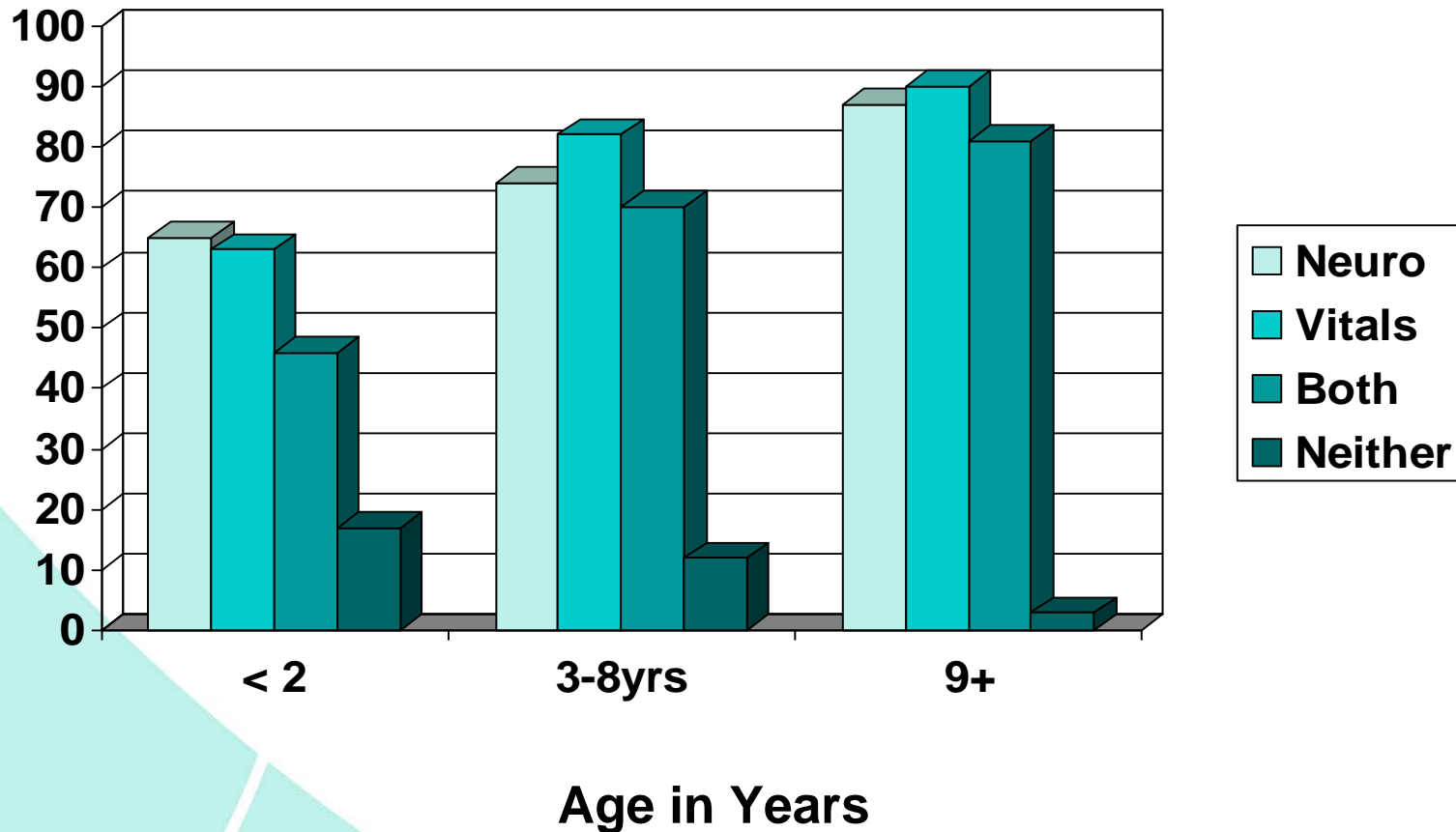
p = 0.01



Neurological observations Head Injury Guideline



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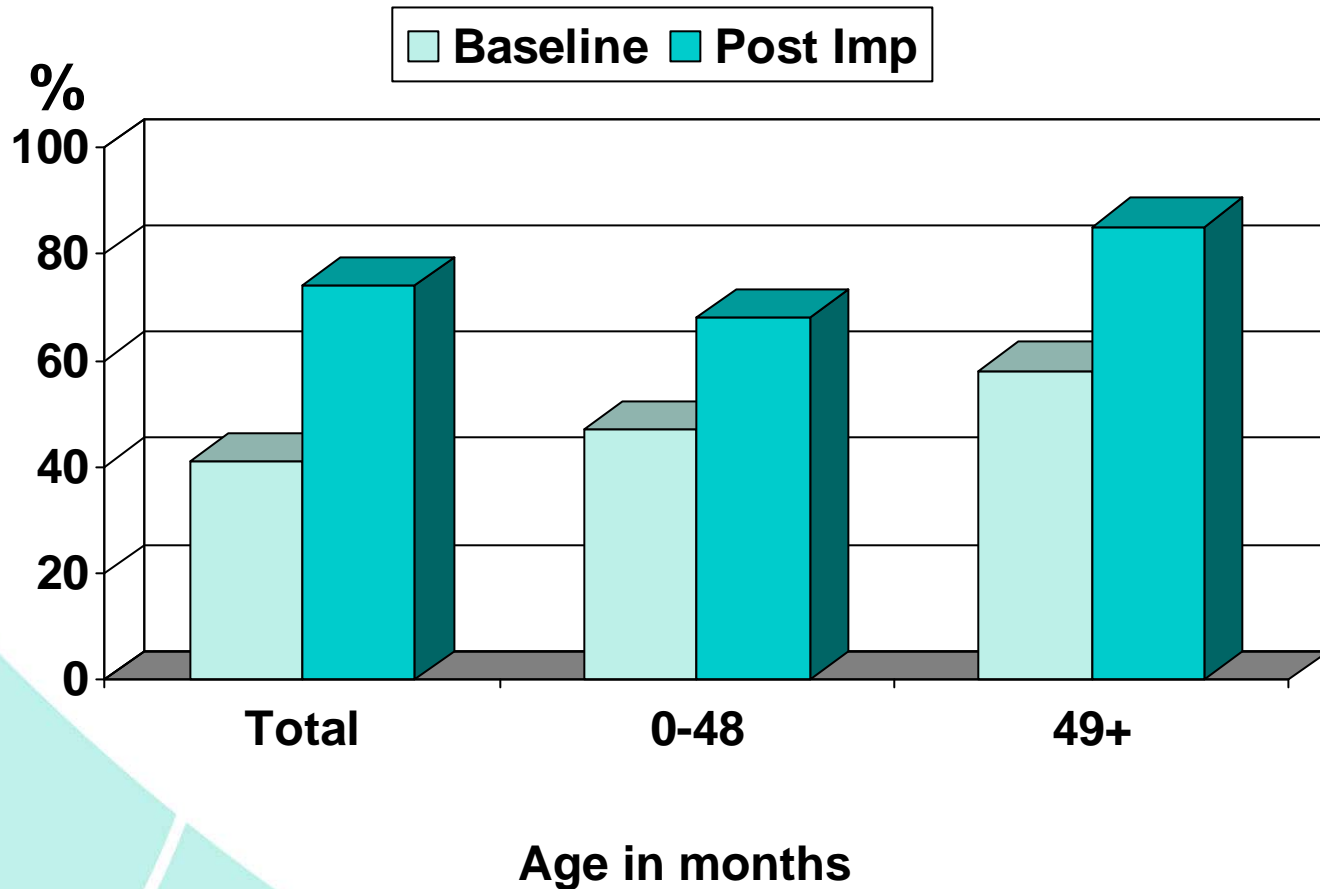




Documentation of vital signs



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n = 556

Baseline p = 0.02



Why the differences?



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- ★ Documentation problem ?
- ★ Adult-focussed clinicians unable to perform clinical observations on young children ?
- ★ *“Cry when approached”*
- ★ *“Takes too long”*





Why?



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- ★ Adult-focussed clinicians unable to interpret observations ?
- ★ *“Tachycardia can be explained by activity and unfamiliar surroundings”*
- ★ *“HR too fast to count”*
- ★ *“Story keeps changing”*





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Why?

- ★ Adult-focussed clinicians don't appreciate the subtlety of illness in young children?
- ★ Early signs of shock may be pallor and tachycardia alone compared to adults with unstable fluctuations in vital signs
- ★ May ignore or discount parental concern





Solution



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- ★ Create awareness
- ★ Possible solutions
- ★ Implement clinical practice guidelines
- ★ Education and Implementation toolkit
- ★ Electronic education module
- ★ Re-audit



Menu

Welcome to the Paediatric Emergency Guidelines training.

If you have not used this training previously, please select the [About the Training](#) option.

Complete the [Recognition of a Sick Child](#) lesson then select each of the condition lessons in any order.

To select a lesson, click on a menu item.

- [About the Training](#)
- [Recognition of a Sick Child](#)

- [Abdominal Pain](#)
- [Asthma](#)
- [Bacterial Meningitis](#)
- [Bronchiolitis](#)
- [Croup](#)
- [Fever](#)
- [Gastroenteritis](#)
- [Head Injury \(1st 24 hours\)](#)
- [Seizures](#)
- [Sore Ear - Otitis Media](#)
- [Sore Throat](#)

- [Knowledge Evaluations](#)

- [Exit](#)

Paediatric Emergency Guidelines

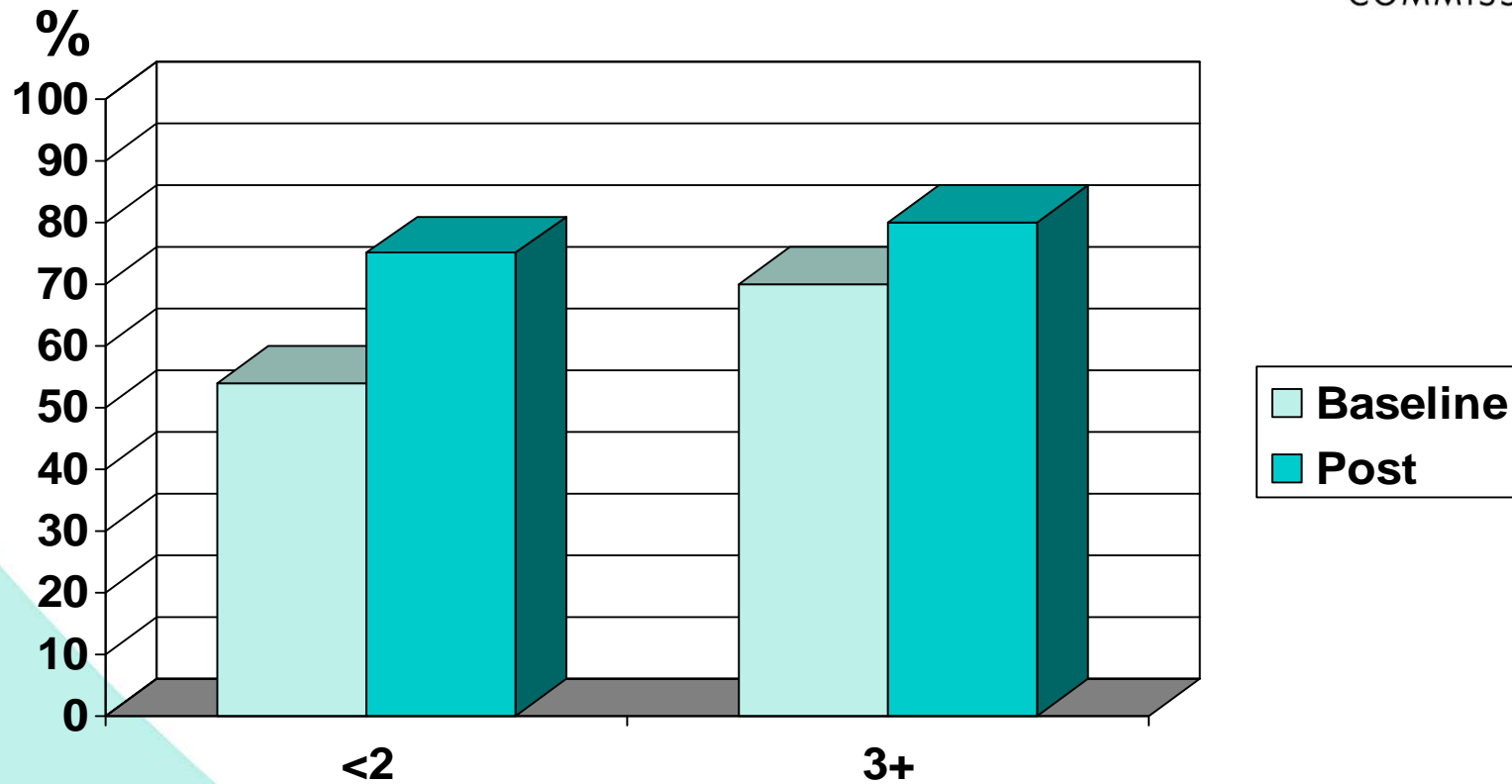




Neurological observations Head Injury



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Baseline – Post
Implementation under 2
years $p = 0.003$

Age in Years



Did the project work?



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External project evaluation demonstrated:

Yes – quality of care for children improved

Yes – clinical practice improved with use of the guidelines

Yes – consistency of care for children improved

Yes – staff tell us they are more confident

Yes – parents are more aware of treatment
and the need to follow advice



Success factors



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- ★ Multi-faceted approach
- ★ Identification of barriers
- ★ Multidisciplinary team
- ★ CPI methodology - Audit & feedback
- ★ Algorithms
- ★ Reminders
- ★ Localisation
- ★ Educational outreach/visits to pilot sites
- ★ Support from Area Executive



Success factors



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- ★ Area based CNCs
- ★ Collaborative nature of project – both Area wide and State-wide networking/ collaboration
- ★ Sharing resources
- ★ Involvement with GPs
- ★ Leadership & direction
- ★ Workshops/learning sessions
- ★ Listserve



Guidelines don't implement themselves



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Distributing guidelines and putting up a few
posters isn't implementation





Where to from here?



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- ★ Complete roll out across the state
- ★ Ongoing review of guidelines based on current evidence
- ★ Quality and safety of paediatric care remains high on the agenda in NSW





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Small changes in clinical practice can
achieve ***big*** changes for children,
their parents and staff.