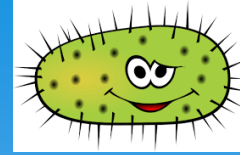
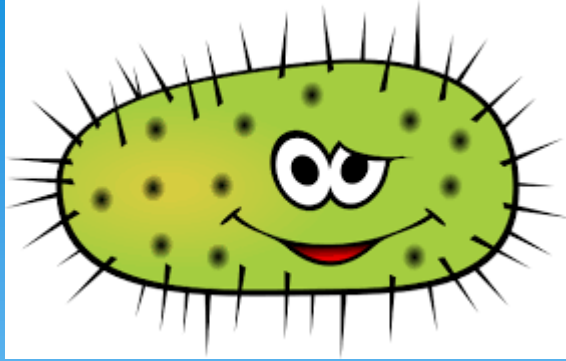
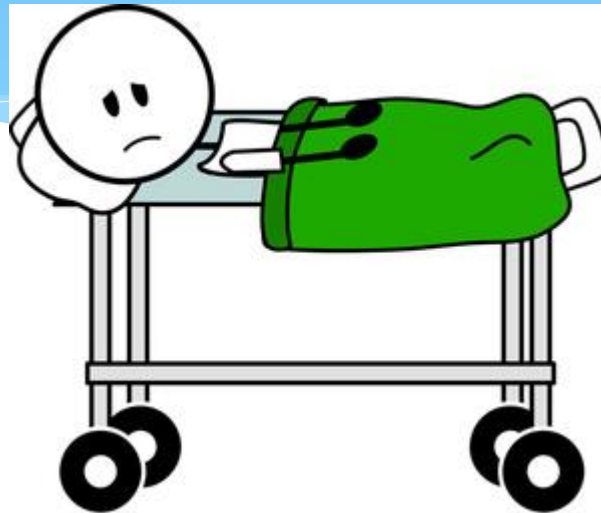


# AMS in Children: Barriers and Enablers

Dr Brendan McMullan  
Sydney Children's Hospital  
NSW AMS Forum Friday 18<sup>th</sup> August 2017



AMS in children: a special case?



# The circle of life



# Points to consider:

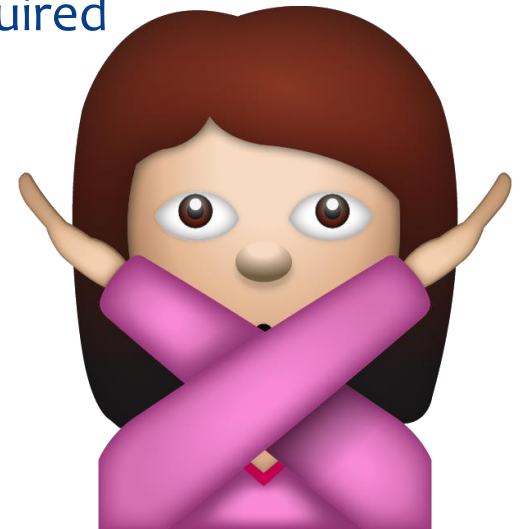
- \* Body size
- \* Drug metabolism and toxicities
- \* Swallowing/formulation
- \* IV access
- \* Response to infection
- \* Spectrum of organisms changes with age
- \* Distinguishing viral from bacterial illness
- \* Local susceptibility data
- \* Travel by proxy

# Barriers to AMS in children

- \* Lack of staff confidence or self-assessed competence
  - \* Medical
    - \* ID/Micro&Paediatrics
    - \* GP/Community contact
  - \* Pharmacy
  - \* Nursing
  - \* Executive support

# Leading to...

- \* We plan to address this later
- \* Small numbers here, OK to leave children out of policy
- \* This is already covered by calling the children's hospital
- \* Little drug resistance in kids, AMS not really required
- \* This is out of my scope of competence
- \* We're not resourced for this
- \* Too hard!



# Other barriers

- \* Evidence lag
  - \* Treatment choice and duration
  - \* Diagnostics
  - \* Susceptibility data
- \* Local fiefdoms:
  - \* I've done this for 25 years...
- \* Communication – hospital teams/parents/child/GP
  - \* Verbal and written

# AMS Enablers





# Effective AMS

- \* Multidisciplinary team
- \* Executive support
- \* Good communication with local prescribers
- \* Evidence base for practice

# AMS targets and interventions

- \* Appropriate empiric therapy
  - \* De-escalation based on microbiology/clinical review
  - \* IV to oral switch
- 
- \* Prescriber education and engagement
  - \* Providing access to guidelines
  - \* Audit and feedback
  - \* Pre-approval restrictions

# Empiric therapy resources

- \* Therapeutic Guidelines: Antibiotic
- \* Children's hospital guidelines
- \* CIAP resources (AMH-CDC, BNF-C)
- \* Local guidelines/electronic decision support (eg. Guidance)
- \* (Paediatric ID advice)

# De-escalation and review

- \* Involve local child health prescribers in AMS committee and/or projects “team champion”
- \* Audit and feedback
  - \* CEC 5x5 audit
- \* Pharmacy –chart review and stickers, liaison with teams
- \* Team huddles

# IV to Oral Switch

- \* Less IV complications, home sooner = win-win
- \* Australian systematic review and guidelines 2016\*
- \* NSW CEC and SCH have developed resources for clinicians and parents – available soon

\* Available at <https://www.asid.net.au/groups/anzpid>

# PROJECT SWITCH: Parent Resource



The Sydney children's  
Hospitals Network



## Making the switch

Changing from intravenous  
to oral antibiotics

### What you need to know before your child goes home

If your child has been given oral antibiotics to continue at home, it is important that you follow the doctor's advice on when, how, and for how long to give them. Use the following checklist to make sure you have the information needed to continue antibiotics safely and confidently at home:

#### Check list

- ☐ Name of the antibiotic
- ☐ How much of the antibiotic to give your child (make sure you use a metric measure or plastic syringe to measure liquid medicines)
- ☐ The times of day you need to give the antibiotic to your child
- ☐ Whether the antibiotic needs to be given on an empty stomach, or with food
- ☐ How long to give the antibiotic for
- ☐ What to do if your child has a reaction or experiences side effects from the antibiotic
- ☐ What to do if your child's condition worsens
- ☐ Who should you contact if you've gone home and you're worried about your child
- ☐ When you need to see your doctor for follow up



The Sydney children's  
Hospitals Network

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# Share the load?

- \* Metropolitan paediatric units (MP4Kids)
- \* Regional Paediatrics NSW
- \* Paediatric ID at SCH and CHW
  - \* other local expertise
- \* ANZPID-ASAP\*
- \* NSW CEC



Easy as...

