APPRISE
AUSTRALIAN PARTNERSHIP FOR PREPAREDNESS RESEARCH ON INFECTIOUS DISEASE EMERGENCIES

Improving and "standardising" infection prevention and control (IPC) and the use of personal protective equipment (PPE) in Australian hospitals

CRE APPRISE Annual meeting 2017

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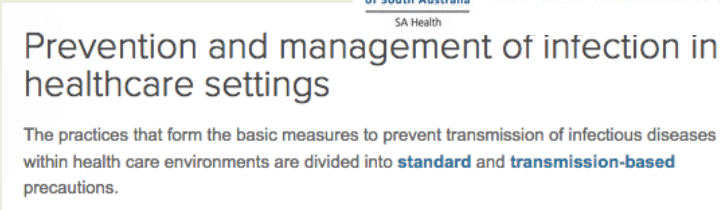
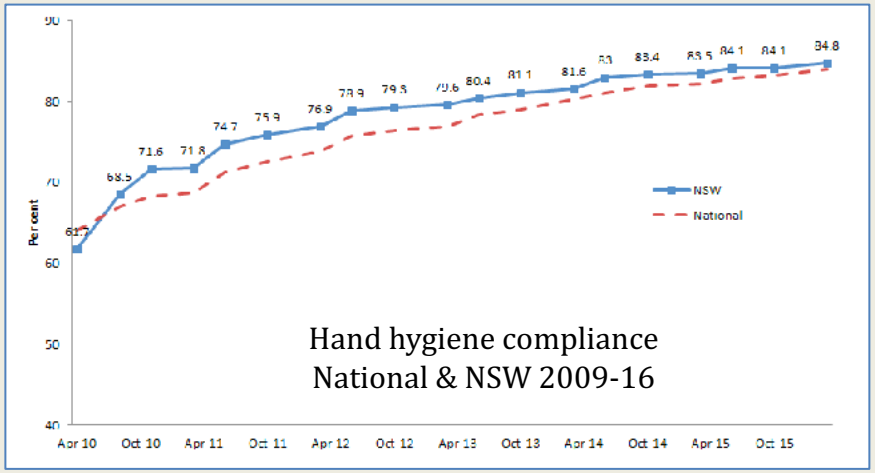
background

- IPC policies & practices
  - variable – between states, hospitals, wards
  - variable - often poor - compliance
  - often rigidly applied
    - little consultation with frontline HCWs
    - resistance, confusion
  - often poorly understood by frontline HCWs



background



Hand hygiene compliance
National & NSW 2009-16

- despite recent improvements…….
  - e.g. National Hand Hygiene Initiative
  - National Safety & Quality Healthcare Standard 3 etc.
- …….HAIs and transmission of MROs continue
- hospitals are potential sources/amplifiers of:
  - community viral infections (e.g. noro-, influenza; measles)
  - multidrug resistant bacteria (colonisation ± disease)
  - emerging infectious diseases (e.g. SARS, MERS)
  - infectious disease of high consequence (IDHC - e.g. Ebola)

aims of IPC

- protect patients (e.g. from MROs)
  - transmission-based precautions
    - variably observed (staff do not feel at risk)
  - training often cursory
    - once; no follow-up
  - competency assumed but not tested
  - “rules” do not fit frontline contexts
    - variably, inconsistently interpreted; confusing
    - ignored, opposed or modified inappropriately

aims of IPC

- protect HCWs (e.g. IDHC)
  - once IDHC recognised
    - over-reaction (too late)
  - *ad hoc*/conflicting leadership
  - administrative/political risk aversion
    - ICP displaced by self-appointed “experts”
  - training expensive, time-consuming, not sustained

goals of this project

- HCWs understand **essential** principles of IPC
- trainers skilled in **effective** communication
- training **embedded** in routine practice
- frontline workers **confident** in applying principles to “real” clinical contexts
- make IPC training **interesting** and fun

outcomes of this project

- better **protection** of patients and HCWs
  - in "routine" clinical settings and……
  - …..when patient with IDHC presents unexpectedly
- skilled workforce **ready** for rapid "up skilling"
  - competent, confident (no excessive fear or refusal to care)
  - able to be rapidly deployed as required……..
  - …..without delay, excessive cost, inconsistency, confusion
- pre-determined risk assessment/response process

using videoreflexivity (VR) in IPC/PPE training

Hypothesis:

1. watching video clips of themselves & colleagues:
   - strengthens "clinicians' IPC awareness and risk realisation"[1]
   - enables them to:
     - visualise & remember what works/doesn't work;
     - anticipate/plan responses to unexpected contingencies (using scenarios/role play)
2. VR can be used to facilitate:
   - off-site simulation +/or hands-on bedside IPC/PPE training
   - understanding & recall of, & compliance with, IPC guidelines/rules
   - modify rules safely & confidently if required by local circumstances
   - training of trainers to use VR & incorporate into routine work

how to achieve the goals?

- research – aims
  - establish effectiveness, acceptability & sustainability
    - novel method(s) e.g. VR vs “conventional” training
- pilot projects
  - sites: in several hospitals/departments
    - “designated” hospitals (RMH, Westmead); high level & routine
    - ?district; ?regional; ?children’s hospitals
    - emergency department; intensive care unit; infectious disease ward/staff
  - methods: VR vs “conventional; simulation centre/bedside
  - assess/compare: HCW competency; cost-effectiveness; sustainability
    - audits, survey, interview, phage contamination
  - stakeholder consultation – expectations, values, concerns

how to achieve the goals?

- funding? limited so far
  - APPRISE (currently 0.6FTE postdoc)
  - ?project grant;?in-kind support from pilot sites
  - PhD scholarship
- translation
  - ?national training program
    - evidence-based proposal for post-APPRISE implementation
  - regular simulated “exercises” to test preparedness

so far…….

- advisory panel
  - nationally& professionally representative
  - 2 meetings; enthusiastic support; great ideas
- 2 potential pilot sites; others suggested
  - detailed discussion with one; protocol under development
  - preliminary meeting with another
  - funding/support an issue
- PhD commencing October
- plan for NHMRC grant application