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How actionable and evidence-based are local policies and procedures in aged care?

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STUDY PROTOCOL

Open Access

IMpleMenting Effective infection prevention and control in ReSidential aged carE (IMMERSE): protocol for a multi-level mixed methods implementation study



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Abstract

Background Older people living in residential aged care facilities are at high risk of acquiring infections such as influenza, gastroenteritis, and more recently COVID-19. These infections are a major cause of morbidity and mortality among this cohort. Quality infection prevention and control practice in residential aged care is therefore imperative. Although appointment of a dedicated infection prevention and control (IPC) lead in every Australian residential aged care facility is now mandated, all people working in this setting have a role to play in IPC. The COVID-19 pandemic revealed inadequacies in IPC in this sector and highlighted the need for interventions to improve implementation of best practice.

Methods Using mixed methods, this four-phase implementation study will use theory-informed approaches to: (1) assess residential aged care facilities' readiness for IPC practice change, (2) explore current practice using scenario-



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Research paper

Analysis of infection prevention and control documentation in residential aged care based on a behaviour specification framework

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Why?



**IPC
policies and
procedures**

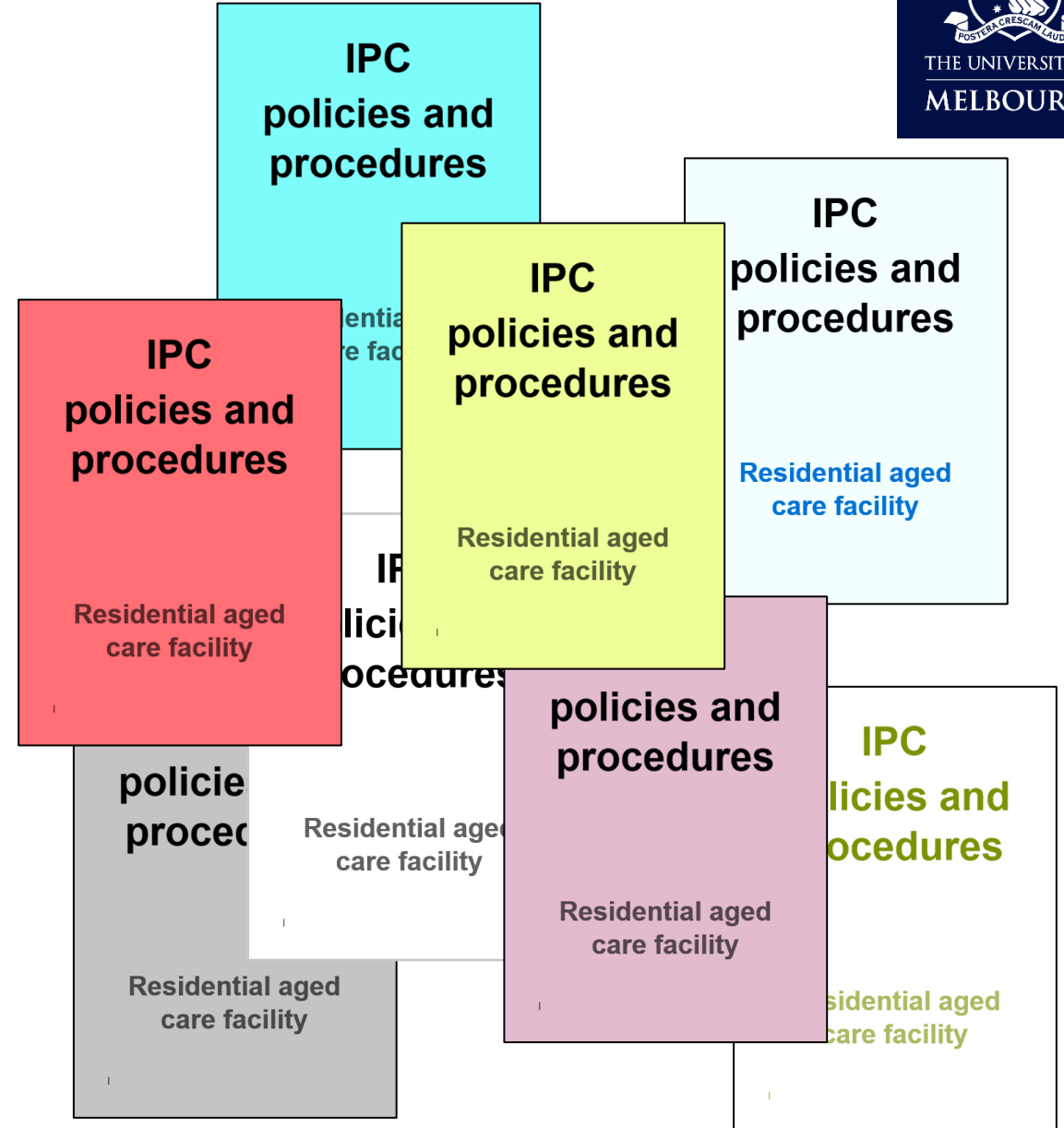
**Residential aged
care facility**



“Personal carers wash their hands with soap and water before touching a resident in the resident’s room”

“Perform hand hygiene”

Aim



How?

**Content
assessment**

**Specificity
assessment**



Fig. 2 AACTT specification for focal and ancillary Actions of multiple Actors, Contexts and Times, with worked example applied to improving hand hygiene

Results



Table 1 Summary table of content assessment.

# Recommended IPC behaviours included in the national guideline	# Recommended IPC behaviours present in RAC providers' local policies and procedures
Hand hygiene (n = 38)	<ul style="list-style-type: none">• <u>Six (16 %) of the 38 statements were mentioned by all RAC providers</u>• <u>Seventeen (45 %) of the statements were mentioned by >75 % of the RAC providers</u>• The remaining 15 statements were mentioned by at least one RAC provider
Appropriate mask use (n = 15)	<ul style="list-style-type: none">• <u>None of the 15 statements were mentioned by all RAC providers</u>• <u>Two statements were mentioned by four (50 %) of RAC providers</u>• The following statement was not mentioned by any of the RAC providers: <i>"Surgical masks can be placed on coughing patients to limit potential dissemination of infectious respiratory secretions from the patient to others"</i>• The remaining 12 statements were mentioned by three or less RAC providers
Appropriate glove use (n = 10)	<ul style="list-style-type: none">• <u>Two (20 %) statements were mentioned by all RAC providers</u>• <u>Two statements were mentioned by seven (88 %) of RAC providers</u>• The remaining six statements were mentioned by five or less RAC providers

Total = 63 behavioural statements

Results



Table 2: Examples of the content analysis between the national guideline and the eight RAC providers' policies and procedures

National guideline recommended IPC behaviours	Present in local policies and procedures (✓=Yes, Shaded box=No)							
	RAC provider 1	RAC provider 2	RAC provider 3	RAC provider 4	RAC provider 5	RAC provider 6	RAC provider 7	RAC provider 8
<u>Washing hands with soap and water is required if hands are visibly soiled</u>	✓	✓	✓	✓	✓	✓	✓	✓
To reduce the risk of cross-transmission of infectious agents, cuts and abrasions should be covered with waterproof dressings.	✓		✓		✓	✓		✓
<u>It is recommended that routine hand hygiene is performed before touching a patient</u>	✓	✓	✓	✓	✓	✓	✓	✓
Masks should never be reapplied after they have been removed		✓	✓				✓	
Touching the front of the mask while wearing it should be avoided			✓		✓		✓	
<u>Hand hygiene should be performed upon touching a mask</u>			✓					
<u>Gloves must be changed between patients</u>	✓		✓	✓	✓	✓	✓	✓
<u>Changing of gloves is necessary: if the patient interaction involves touching portable computer keyboards, other portable devices or any other mobile equipment that is transported from room to room</u>								✓
Gloves should be disposed of as soon as they are removed, with disposal complying with local policies and standards.	✓	✓	✓	✓	✓	✓		✓

Results

Table 3 Recommendations that are in local RAC policies and procedures but not in the national IPC guideline.

RAC provider	Behavioural statement in the RAC providers' local policies and procedures	National guideline reference
1	All staff are encouraged to provide 'just in time feedback' to their peers and colleagues as part of speaking up for safety if they notice a hand hygiene opportunity is about to be missed.	NOT FOUND
1	<u>Gloved hands are not to be washed,</u>	NOT FOUND
1	<u>[Extension of above] nor cleaned with ABHR.</u>	NOT FOUND
1	Hands are completely dry prior to donning gloves.	NOT FOUND
1	Wear gloves when assisting with toileting	<u>IN CONFLICT WITH GUIDELINE</u> "Table A2.3 ADL (washing, toilet etc.) - hand hygiene (not gloves)"
1	<u>Do not use multiple gloves at the same time.</u>	NOT FOUND
1	<u>ABHR is not to be used on gloves.</u>	NOT FOUND
1	Part of sequence for putting on PPE: If an existing mask requires replacement during the donning sequence, this should be performed as the first step	NOT FOUND
4	Employees should change and discard single-use gloves as follows: As soon as gloves are damaged (torn or punctured);	NOT FOUND
4	[Extension of above] DO NOT wash the gloves between uses with different consumers;	NOT FOUND
5, 6 & 8	<u>Gloves must be changed and discarded:</u> <u>As soon as a glove is damaged</u>	NOT FOUND
5, 6 & 8	Staff should protect themselves and others and the environment when wearing gloves by: working from "clean to dirty" areas	NOT FOUND
5, 6 & 8	Other situations for hand hygiene are: Before handling clean linen	NOT FOUND
5	Gloves (non-sterile, powder free, disposable): Must be worn if a staff member has cuts or abrasions.	<u>IN CONFLICT WITH GUIDELINE</u> p. 44 "To reduce the risk of cross-transmission of infectious agents, cuts and abrasions should be covered with waterproof dressings."

Note: ABHR=Alcohol based hand rub; PPE=Personal protective equipment; ADL = Activities of daily living.



'What not to do' → perhaps as a response to observed non-compliance?

Results



Table 4: Number and percentages of AACTT domain mentions of hand hygiene, appropriate use of masks, and appropriate use of gloves: recommended behaviours from the national IPC guidelines and RAC providers' policies and procedures are included

AACTT domains	National Guideline
Behavioural statements related to hand hygiene (Action)	38
Actor	3 (8%)
Context	10 (26%)
Target	4 (11%)
Time	26 (68%)
Behavioural statements related to mask use (Action)	15
Actor	0
Context	9 (60%)
Target	5 (33%)
Time	3 (20%)
Behavioural statements related to glove use (Action)	10
Actor	0
Context	4 (40%)
Target	4 (40%)
Time	6 (60%)
Behavioural statements related to hand hygiene, mask use and glove use	60
Statements that combined hand hygiene with glove or mask use	3

Results




Table 4: Number and percentages of AACTT domain mentions of hand hygiene, appropriate use of masks, and appropriate use of gloves: recommended behaviours from the national IPC guidelines and RAC providers' policies and procedures are included

AACTT domains	National Guideline	RAC local policies and procedures							
		Provider 1	Provider 2	Provider 3	Provider 4	Provider 5	Provider 6	Provider 7	Provider 8
Behavioural statements related to hand hygiene (Action)	38	33	27	46	12	31	34	19	31
Actor	3 (8%)	11 (33%)	9 (33%)	5 (11%)	4 (33%)	8 (26%)	8 (24%)	17 (89%)	8 (26%)
Context	10 (26%)	7 (21%)	8 (30%)	7 (15%)	3 (25%)	7 (23%)	7 (21%)	3 (16%)	7 (23%)
Target	4 (11%)	4 (12%)	0	13 (28%)	3 (25%)	7 (23%)	7 (21%)	1 (5%)	7 (23%)
Time	26 (68%)	21 (67%)	22 (81%)	33 (72%)	7 (58%)	23 (74%)	26 (76%)	15 (79%)	23 (74%)
Behavioural statements related to mask use (Action)	15	1	19	11	1	0	7	9	14
Actor	0	0	0	0	1 (100%)	0	1 (14%)	0	6 (43%)
Context	9 (60%)	1 (100%)	6 (32%)	1 (9%)	1 (100%)	0	2 (28%)	4 (44%)	7 (50%)
Target	5 (33%)	0	0	0	0	0	0	1 (11%)	3 (21%)
Time	3 (20%)	0	11 (58%)	11 (100%)	0	0	2 (28%)	0	8 (57%)
Behavioural statements related to glove use (Action)	10	11	29	19	11	12	17	12	13
Actor	0	1 (9%)	0	1 (5%)	9 (81%)	4 (33%)	6 (35%)	1 (8%)	5 (38%)
Context	4 (40%)	3 (27%)	16 (55%)	13 (68%)	1 (9%)	5 (42%)	9 (53%)	5 (42%)	6 (46%)
Target	4 (40%)	0	1 (3%)	2 (10%)	3 (27%)	3 (25%)	3 (18%)	3 (25%)	3 (23%)
Time	6 (60%)	3 (27%)	10 (34%)	5 (26%)	9 (81%)	7 (58%)	8 (47%)	5 (42%)	7 (54%)
Behavioural statements related to hand hygiene, mask use and glove use	60	40	70	69	40	41	55	39	42
Statements that combined hand hygiene with glove or mask use	3	5	5	6	1	2	2	1	2

What's next?



- Converting national guidelines into local policies and procedures
 - Alignment  **AACTT framework (Action, Actor, Context, Time, Target)**
 - Actionability
- Verifying and refining local policies and procedures
- Enough detail but not burdensome
- Policies and procedures are not enough for practice change
- Co-design

Podcast



The image shows a podcast player interface. On the left is a teal and black cover for the podcast "INFECTION CONTROL MATTERS" with the subtitle "DISCUSSIONS ON INFECTION PREVENTION". The cover features a stylized virus particle. To the right of the cover is a large green play button icon. Further right, the date "Wednesday May 14, 2025" is displayed above the title "National vs local IPC Guidelines - Lost in Translation?". Below the title are three interactive icons: a heart for "Likes", a download arrow for "Download", and a share icon for "Share".

Dr Sanne Peters and Prof Kirsty Buising
Hosts: Prof Brett Mitchell and Prof Martin Kiernan

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Thank you

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