

Learning from COVID-19

Summary of feedback from the hospital and aged residential care (ARC) surveys during the COVID-19 response to identify gaps and opportunities for improvement

December 2020



Contents

Document purpose	2
Background	3
Hospital survey summary	4
Demographics for hospital survey	4
Key findings in hospital survey	5
Aged residential care (ARC) survey summary	8
Demographics for ARC survey	8
Key findings in ARC survey	10
Conclusion	13
Next steps	13
Appendix 1: Summary of responses to hospital survey (145 total responses)	14
Appendix 2: Summary of responses to ARC survey (353 total responses)	19

Published by the Health Quality & Safety Commission New Zealand, December 2020

Enquiries to: IPC@hqsc.govt.nz

Document purpose

This document summarises the responses to two surveys relating to infection prevention and control (IPC) during the COVID-19 pandemic response. The surveys were conducted by the Health Quality & Safety Commission in July–August 2020. One survey related to hospital settings; the other to aged residential care (ARC).

The aim of the surveys was to better understand and identify needs and opportunities relating to IPC for the specific acute care and community settings so we can reconsider Aotearoa New Zealand’s future IPC approach to keeping its population safe – with or without a pandemic.

A summary of the hospital survey responses is in [Appendix 1](#).

A summary of the ARC survey responses is in [Appendix 2](#).

Background

The importance of Aotearoa New Zealand having a strongly led, cross-sector approach to IPC is ever-increasing as we reflect on and continue to respond to the effects of the COVID-19 pandemic. Reports of lack of evidence-based IPC information and resources, and a shortage of IPC experts available to give advice and direction to the sector are clear indications of the need for improvement.

A strong, well-led IPC approach is always important, not just during a pandemic. While there is already valuable work being undertaken in IPC by different organisations and agencies, we are in a unique position now to reconsider Aotearoa New Zealand's approach to IPC so we can keep the population safe from infection in the future – with or without a pandemic.

It is therefore good timing that we are collaborating with partner agencies to explore what a national and unified approach to IPC might look like. Through this multi-agency collaboration and expanded focus, we aim to develop and coordinate a strongly led, evidence-based, cross-sector approach that encompasses community, secondary and tertiary care to protect the health of all New Zealanders.

The Health Quality & Safety Commission (the Commission) has supported and continues to support the response to the COVID-19 pandemic at national, regional and local levels. During this work, we have seen variation in responses and support for IPC functions across the sector, and identified challenges and opportunities to ensure IPC is supported in a more integrated and systematic way, particularly in hospital and ARC settings.

To help us scope and plan how to strengthen our IPC approach, we distributed different versions of a survey to key IPC stakeholders,¹ with the aim of better understanding and identifying needs and opportunities for the specific acute care and community settings.

The survey questions were shaped by our experiences of being involved in COVID-19 preparedness and response activities. The survey asked respondents about:

- their current role
- how many FTEs² were allocated to IPC in their facility
- where they currently accessed IPC information for COVID-19 preparedness and response
- what gaps they had identified in IPC resources and IPC knowledge and practical application for the COVID-19 response
- what were the opportunities for improving equity related to IPC practices
- what IPC projects would be valuable over the next 2–5 years
- what factors added to organisational resilience and responsiveness during the pandemic.

We received 145 and 353 responses for the hospital and ARC surveys, respectively.

The information from the survey responses and other relevant reports will help us plan to support hospital and ARC IPC practices and contribute to a strongly led, evidence-based, cross-sector approach to IPC.

¹ The key target audiences for the surveys were IPC groups, IPC team leads and committee chairs, quality and risk managers, members of the Ministry of Health technical advisory IPC subgroup for COVID-19, external IPC experts, relevant colleges and associations, and IPC stakeholders from ARC.

² Full-time equivalent.

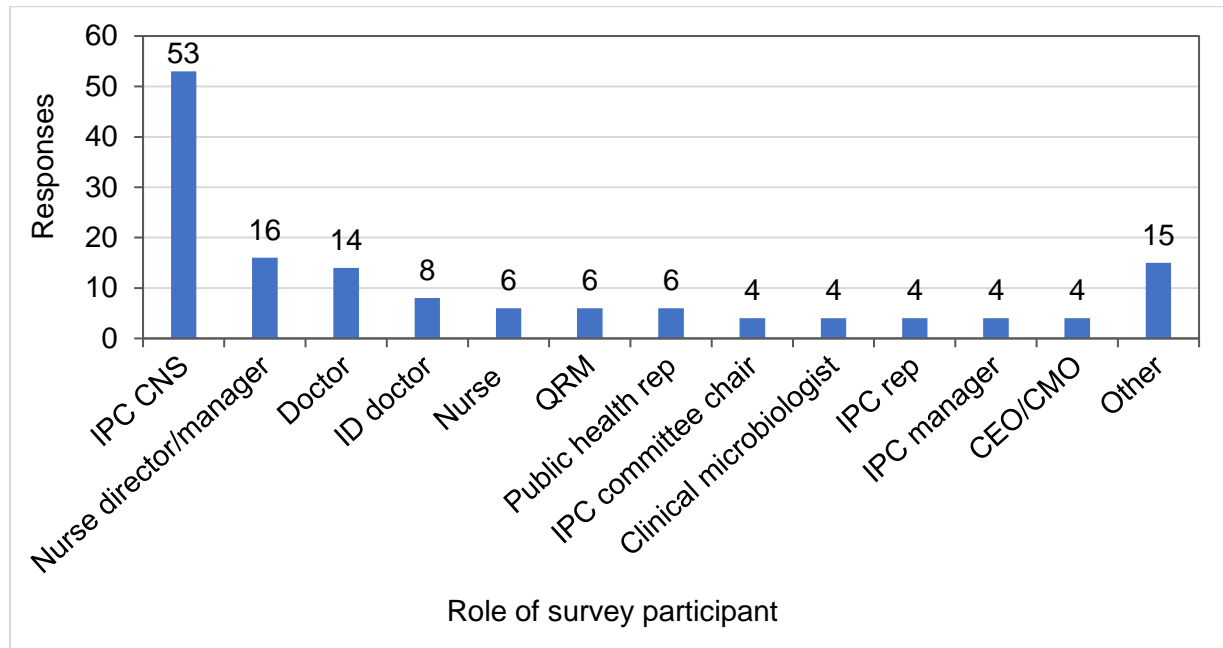
Hospital survey summary

Demographics for hospital survey

A total of 145 responses were received for the hospital survey.

Most responses were from IPC clinical nurse specialists (37 percent), managers (14 percent) and doctors (16 percent) (Figure 1). Approximately three-quarters of the responses represented all 20 DHBs and one-quarter represented the non-DHB acute care sector.

Figure 1: Roles of participants, hospital survey, 2020 (n = 145)



CEO = chief executive; CMO = chief medical officer; CNS = clinical nurse specialist; ID = infectious disease; IPC = infection prevention and control; QRM = quality and risk manager.

Responses by hospitals and health care worker type were as follows:

- Public hospitals (111 responses) – the majority of responses came from IPC clinical nurse specialists (26 percent), clinical nurse managers (15 percent) and infectious disease doctors/clinical microbiologists (10 percent).
- Private hospitals (25 responses) – the majority of responses came from IPC clinical nurse specialists (72 percent).
- Unknown setting (8 responses) – these are responses that did not indicate hospital location.
- Other setting (1 response) – one response came from a public health unit.

Responses to the hospital survey by region are shown in Table 1.

Table 1: Responses by DHB region, hospital survey, 2020

Hospital	Responses	Count
Northern region DHB	19.7%	27
Midland region DHB	32.8%	45
Central region DHB	7.3%	10
South Island DHB	21.2%	29
Private surgical hospital	18.2%	25
Unknown	5.5%	8
Other	0.7%	1
Total respondents answered		145

DHB = district health board.

Responses were received from all 20 DHBs. Most DHB responses came from the Midland region (33 percent) followed by South Island region (21 percent) and Northern region (20 percent).

Key findings in hospital survey

What IPC resources gaps were identified during COVID-19 planning and response?

The gaps in IPC resources hospital survey participants identified during the early planning stage for COVID-19 are shown in Table 2. Respondents could select more than one answer.

Table 2: Identified IPC resources gaps, hospital survey, 2020

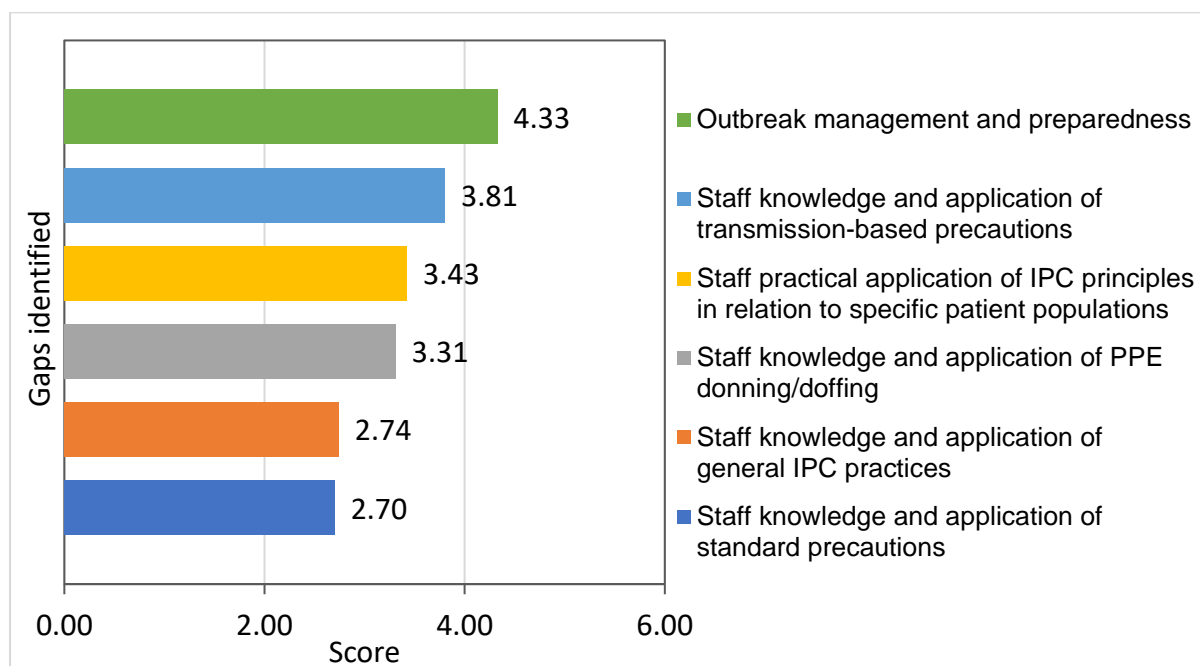
Gaps in IPC resources during early planning for COVID-19	Responses	Count
Information about PPE use	76.5%	65
National IPC guidance for acute care	58.8%	50
Education	58.8%	50
Visual aids (posters etc)	47.1%	40
National IPC guidance for non-acute care (ARC and primary care)	40.0%	34
Other	32.9%	28

ARC = aged residential care; IPC = infection prevention and control; PPE = personal protective equipment.

Some of the questions in the survey asked the participant to select and rank options from a list. Scores for each option were determined by multiple criteria decision analysis of the weighted data rankings. By attaching weights to the criteria and processing the numerical values, a ranking score was calculated for each alternative. The numbers listed in the figures below represent the calculated score for each option. Higher scores represent the favoured options.

The gaps in IPC resources hospital survey participants identified in their hospital are shown in Figure 2. Respondents were asked to select and rank the resources in order of gap.

Figure 2: Identified IPC resource gaps during COVID-19 planning and response, hospital survey, 2020



IPC = infection prevention and control; PPE = personal protective equipment.

The gaps in knowledge and application of general IPC practices hospital survey participants identified are shown in Table 3. Respondents could select more than one answer.

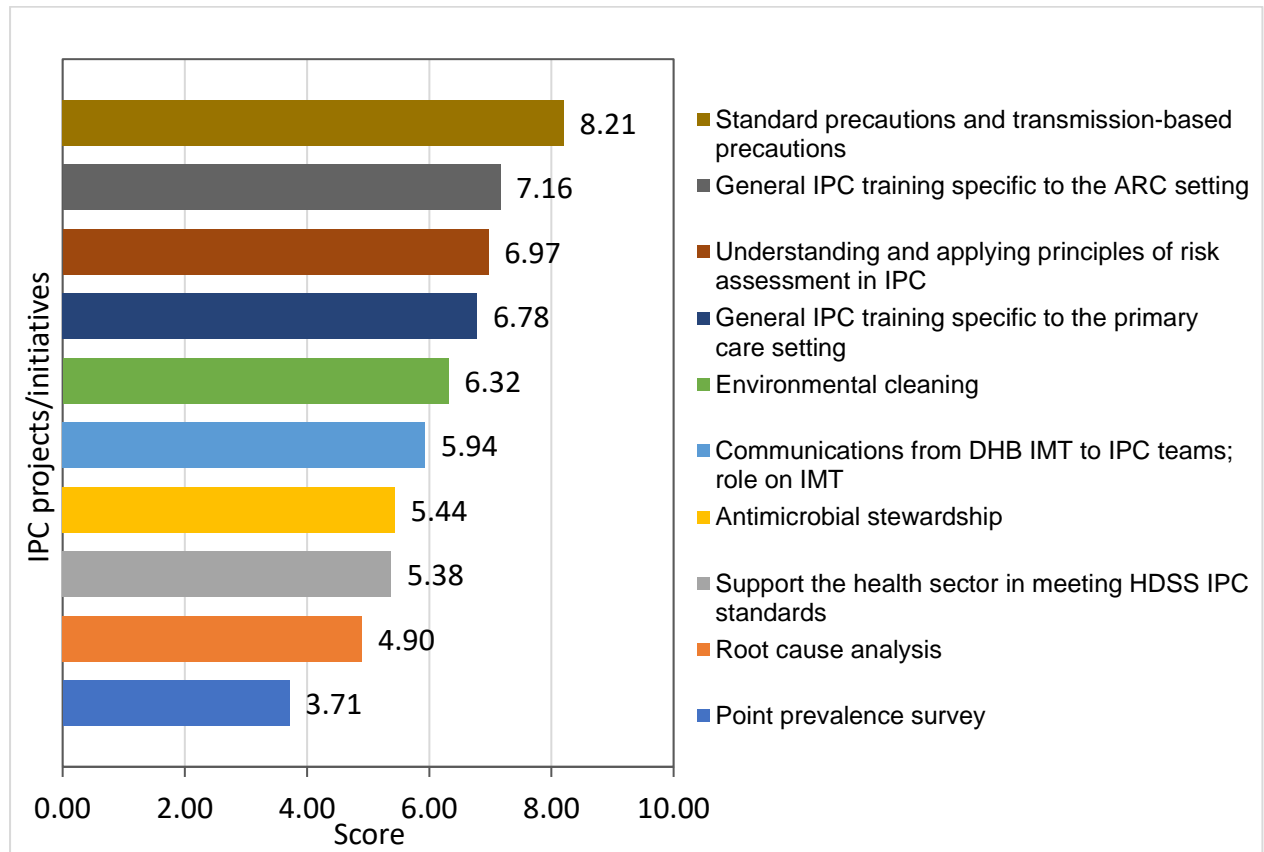
Table 3: Identified gaps in staff knowledge and application of general IPC practices, hospital survey, 2020

Gap in staff knowledge and application of general IPC practices	Responses	Count
Environmental cleaning	44.6%	29
Hand hygiene	32.3%	21
Waste management	24.6%	16
Preventing device-associated infections	23.1%	15
Other	44.6%	29

IPC = infection prevention and control.

IPC-specific projects/initiatives that the hospital survey participants identified would be valuable are shown in Figure 4. Respondents were asked to select and rank the projects.

Figure 4: Identified IPC-specific projects/initiatives that would be valuable over the next 2–5 years, hospital survey, 2020



ARC = aged residential care; DHB = district health board; HDSS = health and disability services standards; IMT = incident management team; IPC = infection prevention and control.

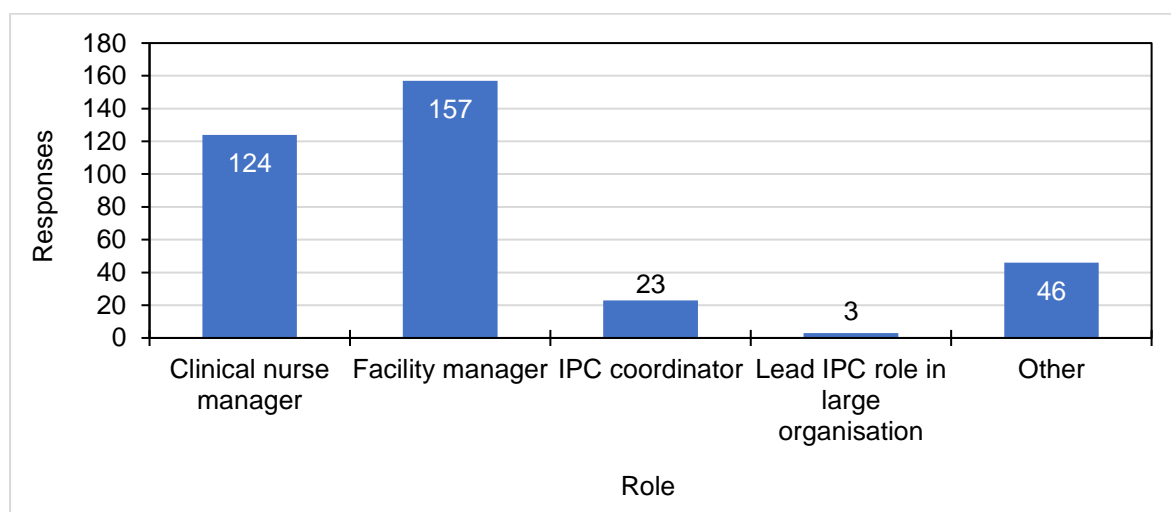
Aged residential care (ARC) survey summary

Demographics for ARC survey

A total of 353 responses were received for the ARC survey.

The majority of survey responses were from facility managers (44 percent), clinical nurse managers (35 percent) and IPC coordinators (7 percent) (Figure 5). While the number of responses from IPC coordinators and leads may appear small, this may be an under-representation of the number of survey participants with IPC responsibilities because many of the clinical nurse managers or facility managers may have the role of IPC coordinator for their facility but they identified as their main role when completing the survey.

Figure 5: Role at facility, aged residential care survey, 2020 (n = 353)



IPC = infection prevention and control.

Figure 6 represents the number of survey responses according to the number of beds and type of facility. One hundred and fifty-nine responses came from independent or stand-alone facilities. One hundred and ninety-one were from people who work in a facility that is part of a national or regional provider organisation. As expected, the majority of responses relating to the smallest facilities (25 beds or fewer) were from individuals who work in independent or stand-alone facilities. As bed number in a facility increases, responses are more likely to be from people working in facilities that are part of larger organisations.

Figure 6: Bed size by facility, aged residential care survey, 2020

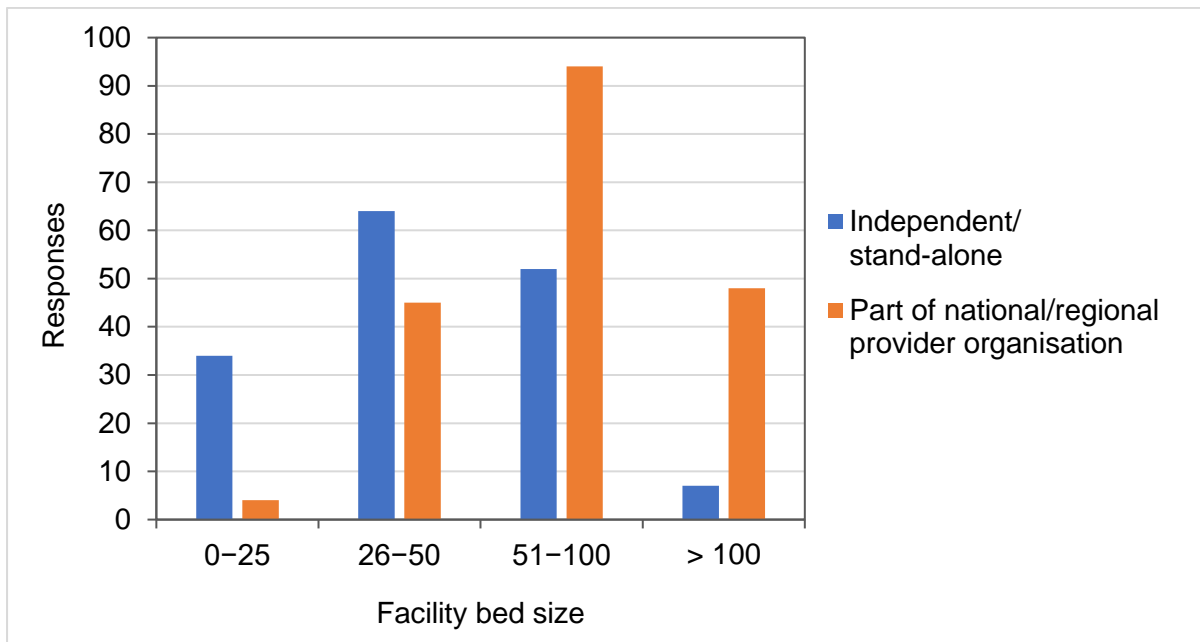
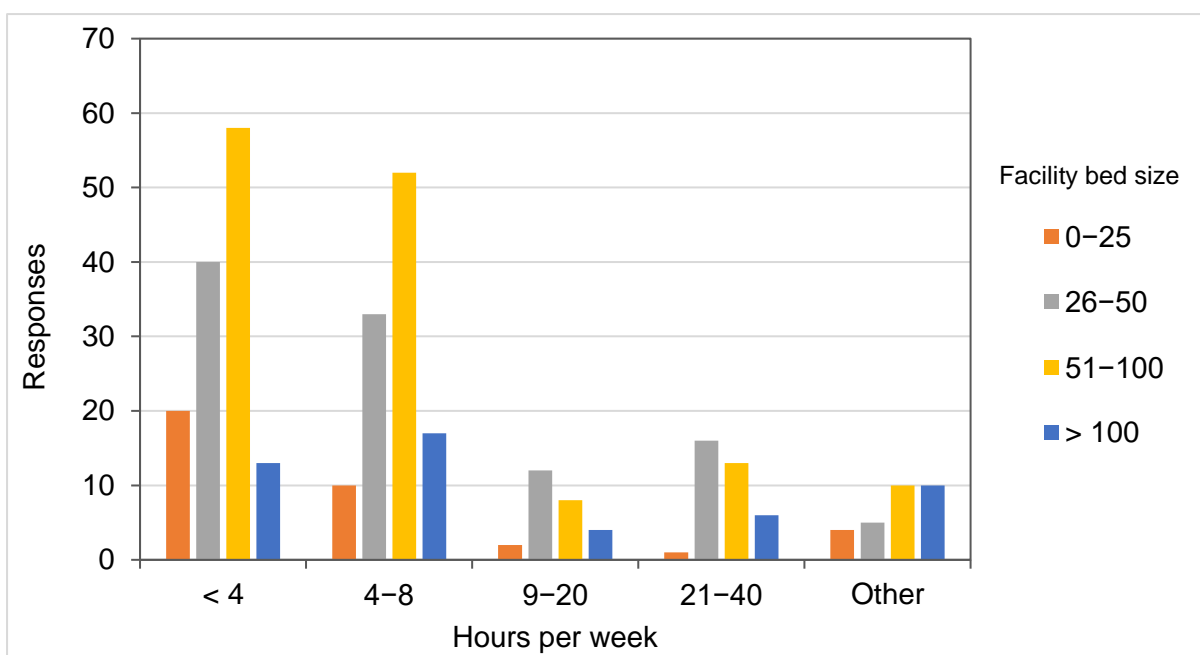


Figure 7 shows the number of hours per week allocated to IPC by facility bed size. The majority of responses indicated that facilities allocate less than one day per week to IPC policies and practices. Some responses indicated zero hours were allocated to IPC at their facility. The data highlights the need to further explore the reasons for this and understand the specific roles and responsibilities related to the IPC allocation. This will help us to support IPC coordinators in the ARC sector further through specific projects, access to relevant information and forming a network of IPC coordinators across the sector to share best practice and learning.

Figure 7: Hours per week allocated to IPC by facility bed size, aged residential care survey, 2020



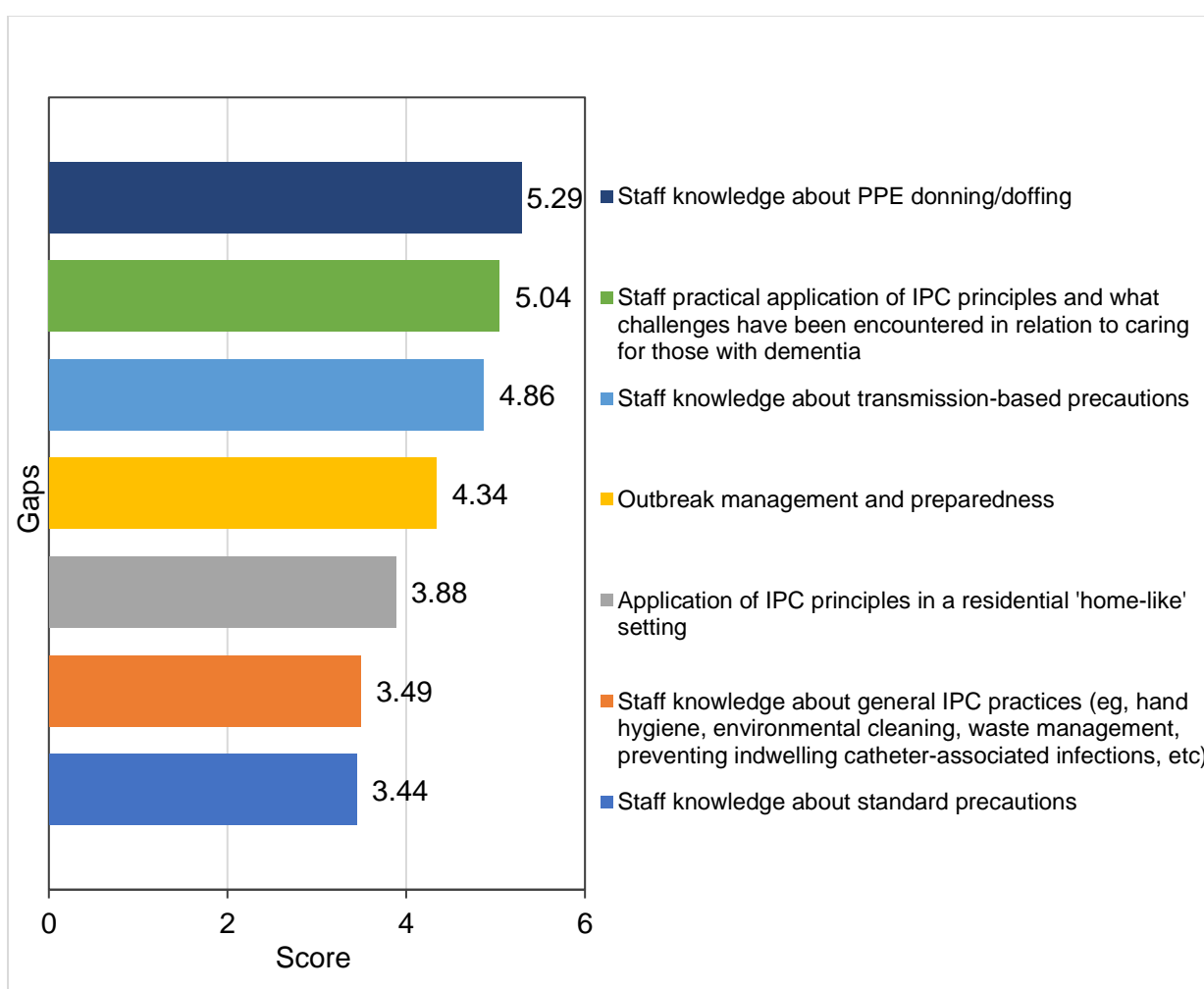
Key findings in ARC survey

Some questions in the ARC survey asked the participant to select and rank options from a list. Scores of each option were determined by multiple criteria decision analysis of the weighted data rankings. By attaching weights to the criteria and processing the numerical values, a ranking score was calculated for each alternative. The numbers listed in the figures below represent the calculated score for each option. Higher scores represent the favoured options.

What IPC resources gaps were identified during COVID-19 planning and response?

The gaps in IPC resources ARC survey participants identified in their facility are shown in Figure 8. Respondents were asked to select and rank the resources in order of gap.

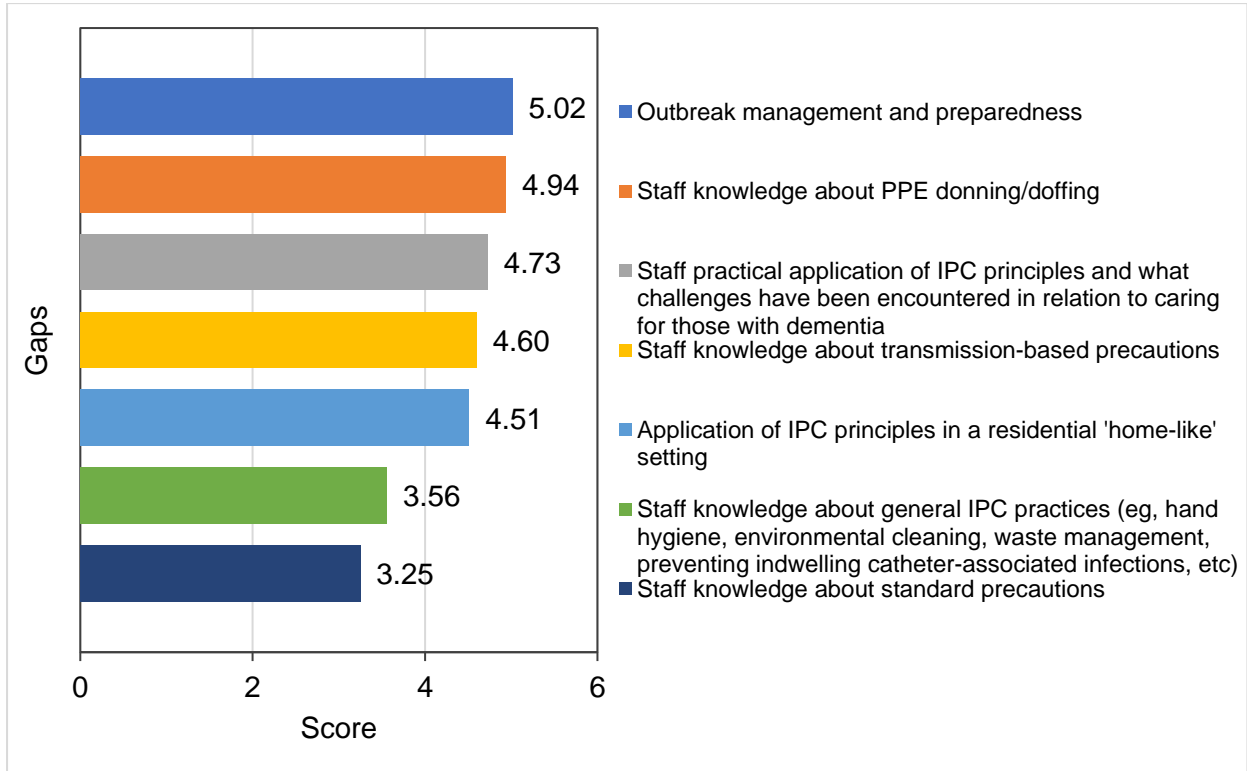
Figure 8: IPC resources gaps identified during COVID-19 planning and response, aged residential care survey, 2020



IPC = infection prevention and control; PPE = personal protective equipment.

The gaps in IPC resources ARC survey participants identified across the ARC sector are shown in Figure 9. Respondents were asked to select and rank the resources in order of gap.

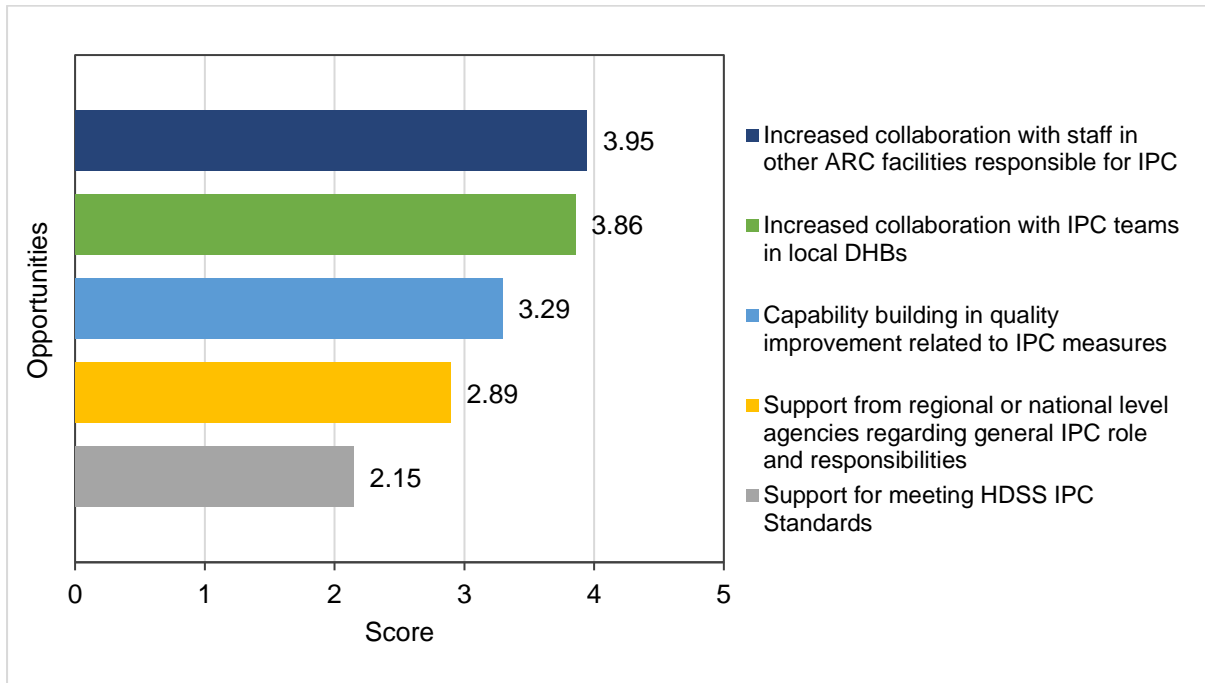
Figure 9: IPC resources gaps identified during COVID-19 planning and response across the sector, aged residential care survey, 2020



IPC = infection prevention and control; PPE = personal protective equipment.

The IPC opportunities for improvement at a national level ARC survey participants identified are shown in Figure 10.

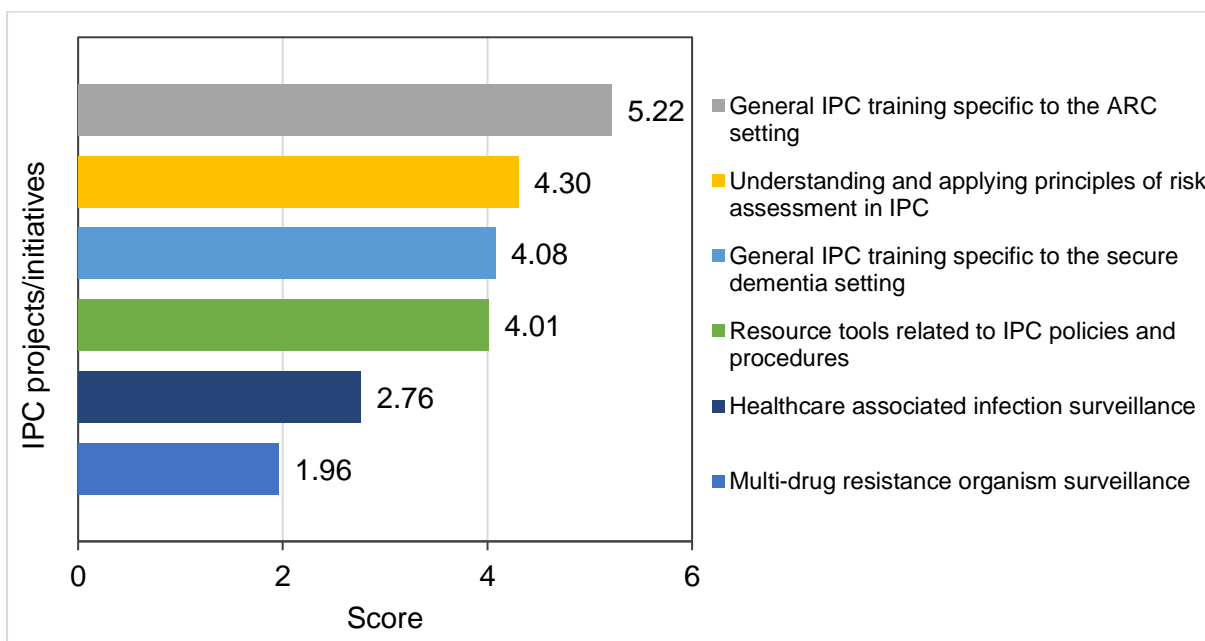
Figure 10: IPC opportunities for improvement at a national level, aged residential care survey, 2020



ARC = aged residential care; DHB = district health board; HDSS = health and disability services standards; IMT = incident management team; IPC = infection prevention and control.

IPC-specific projects/initiatives that the ARC survey participants identified would be valuable are shown in Figure 11.

Figure 11: IPC-specific projects/initiatives that would be valuable over the next 2–5 years, aged residential care survey, 2020



ARC = aged residential care; IPC = infection prevention and control.

Conclusion

The results of both surveys, along with other independently published reports (described below) give us enough information to consider and agree the next steps, in partnership with other agencies, for the expanded national approach to IPC.

We want the right support to be given to hospitals and ARC. There are some differences in the needs of hospitals and ARC although some projects and resources may apply to both groups.

Next steps

Before we finalise what specific IPC projects/initiatives to facilitate, we will consider other relevant recent reports and findings from assessments and reviews gathered by the sector on the COVID-19 IPC response. For example, the Waitakere Hospital review, the ARC cluster review and associated Ministry of Health action plan, and health care worker transmissions may provide valuable insights into current gaps that will inform the scope of future IPC initiatives.

The results and key themes from the surveys will be discussed with IPC stakeholders and advisory groups in Aotearoa New Zealand to help us prioritise future IPC initiatives. We will also present the results during national webinars, where IPC stakeholders will have the opportunity to provide further input into the plan for an expanded IPC approach.

The Commission's strategic infection prevention and control advisory group will then endorse a refined list of future activities. Following this, we will engage with other agencies to determine opportunities for collaboration. It will be important to understand what other work related to COVID-19 opportunities is taking place to ensure alignment and prevent duplication of work.

Once the scoping and prioritisation phases are complete, we will oversee the development of an enhanced national approach to IPC for the next 2–5 years.

Acknowledgement: We would like to extend a heartfelt thank you to everyone who distributed and completed the surveys.

Appendix 1: Summary of responses to hospital survey (145 total responses)

Q1. Survey respondent's role at DHB/private surgical hospital	Responses	Count
IPC clinical nurse specialist	36.81%	53
IPC committee chair	2.78%	4
Quality and risk manager	4.17%	6
Infectious disease doctor	5.56%	8
Clinical microbiologist	2.78%	4
Other (please specify)	47.92%	69
<i>Total respondents answered</i>		<i>144</i>

Q2. Number of total FTEs dedicated to IPC in DHB/private surgical hospital/organisation	Responses	Count
0	3.0%	4
≤ 0.2	11.4%	15
0.3–0.4	3.8%	5
0.5–0.9	12.9%	17
1.0–1.9	15.9%	21
2.0–2.9	14.4%	19
3.0–3.9	3.8%	5
4.0–4.9	2.3%	3
5.0–10.0	10.6%	14
≥ 10	3.0%	4
Unknown	18.9%	25
<i>Total respondents answered</i>		<i>132</i>

Q3. DHB/private surgical hospital of survey respondents	Responses	Count
Northern region DHB	19.7%	27
Midland region DHB	32.8%	45
Central region DHB	7.3%	10
South Island DHB	21.2%	29
Private surgical hospital	18.2%	25
Other	0.7%	1
<i>Total respondents answered</i>		<i>137</i>

Q4. Survey participant responded on behalf of:	Responses	Count
Themselves	73.6%	103
Their team	15.0%	21
Their organisation	11.4%	16
<i>Total respondents answered</i>		<i>140</i>

Q5. IPC resources that DHB/private surgical hospitals used for the COVID-19 response. All applicable options were selected	Responses	Count
Ministry of Health website	100.0%	95
Organisational-level guidance	90.5%	86
WHO COVID-19 website	74.7%	71
Regional incident management team	54.7%	52
CDC website	41.0%	39
Australian guidance	29.5%	28
Health Quality & Safety Commission resources	25.3%	24
Other	25.3%	24
<i>Total respondents answered</i>		<i>95</i>

Q6. Gaps in IPC resources identified, within a DHB/private surgical hospital or across the sector, during the early planning stage for COVID-19. All applicable options were selected	Responses	Count
Information about PPE use	76.5%	65
National IPC guidance for acute care	58.8%	50
Education	58.8%	50
Visual aids (posters etc)	47.1%	40
National IPC guidance for non-acute care	40.0%	34
Other	32.9%	28
<i>Total respondents answered</i>		<i>85</i>

Q7. Gaps in IPC resources in DHB/private surgical hospital identified during COVID-19 preparedness and response. Options were selected and ranked by most significant gap	Score
Staff knowledge and application of standard precautions	2.70
Staff knowledge an application of general IPC practices	2.74
Staff knowledge and application of PPE donning/doffing	3.31
Staff practical application of IPC principles in relation to specific patient populations	3.43
Staff knowledge and application of transmission-based precautions	3.81
Outbreak management and preparedness	4.33

Q8. Other gaps identified at DHB/private surgical hospital during COVID-19 preparedness and response	Score
Personal protective equipment (PPE)	20
Transmission-based precautions	3
Patient flow/transfers	3
Staff bubbles	1
Auditing compliance	1

Q9. Gaps in staff knowledge and application of general IPC practices at DHB/private surgical hospital during COVID-19 preparedness and response. All applicable options were selected	Responses	Count
Environmental cleaning	44.6%	29
Hand hygiene	32.3%	21
Waste management	24.6%	16
Preventing device-associated infections	23.1%	15
Other	44.6%	29
<i>Total respondents answered</i>		65

Q10. Opportunities identified for improving equity related to IPC practices in acute care for different population groups during COVID-19 response	Responses	Count
No	59.0%	49
Yes, please specify	41.0%	34
<i>Total respondents answered</i>		83

Q10a. Opportunities to improve equity <i>(thematic analysis from free-text comments)</i>	Count
Education	11
Clinical services available	6
National information access	6
Patient and staff groups	6
Health literacy	4
PPE availability	3
Health care worker safety in different settings	2
Health care worker attire/uniform	1
Data	1
<i>Total respondents answered</i>	34

Q11. IPC-specific projects or initiatives that would be valuable long-term (eg, over the next 2–5 years), to strengthen responses to new and emerging diseases. Projects/initiatives were selected and ranked	Score
Point prevalence survey	3.71
Root cause analysis	4.90
Support the health sector in meeting health and disability services standards for IPC	5.38
Antimicrobial stewardship	5.44
Communications from DHB incident management team to IPC teams; role on IMT	5.94
Environmental cleaning	6.32
General IPC training specific to the primary care setting	6.78
Understanding and applying principles of risk assessment in IPC	6.97
General IPC training specific to the ARC setting	7.16
Standard precautions and transmission-based precautions	8.21

Q12. Other IPC-specific projects or initiatives, that would be valuable long-term (eg, over the next 2–5 years), to strengthen responses to new and emerging diseases <i>(thematic analysis from free-text comments)</i>	Count
Pandemic preparedness	22
Adequate IPC resourcing and support	16
IPC education for staff	14
Consistent/standardised IPC guidance	8
Surveillance system	6

Misc	5
Networking and sharing of IPC resources	4
Health and disability services standards for IPC alignment	4
Building/facility compliance for IPC	3
IPC professional development	2
Public and private sector collaboration	2
<i>Total respondents answered</i>	<i>74</i>

Q13. Other important information about IPC provision in DHB/private surgical hospital that should be highlighted <i>(thematic analysis from free-text comments)</i>	Count
Inadequate funding for IPC	20
No clarity regarding PPE availability	15
Leadership support of IPC needed	8
Improved communication needed	8
Information inconsistency	6
Inadequate hospital size and environment	5
Lack of e-surveillance tools	3
Patient privacy concerns	2
<i>Total respondents answered</i>	<i>62</i>

Q14. Factors that added to the resilience and responsiveness of an organisation during the COVID-19 pandemic <i>(thematic analysis from free-text comments)</i>	Count
Collaboration/teamwork	29
Dedication/commitment/overtime	24
Good organisational support	18
Good communication	17
Experience	9
IT systems for IPC	1
Humour	1
<i>Total respondents answered</i>	<i>77</i>

Appendix 2: Summary of responses to ARC survey (353 total responses)

Q1. Survey respondent's role at facility	Responses	Count
Facility manager	44.0%	157
Clinical nurse manager	35.0%	124
IPC coordinator	7.0%	23
Lead IPC role in larger organisation (covers multiple sites)	1.0%	3
Other (please specify)	13.0%	46

Q1a. Survey respondent's role at facility if 'other' was selected in previous question <i>(thematic analysis from free-text comments)</i>	Count
Manager (other)	16
Nurse	10
CEO/DON/Company GM/Director/Owner	7
IPC/health and safety	6
Unit clinical coordinator	3
Educator	1
Doctor	1
Clinical improvement	1
<i>Total respondents answered</i>	<i>45</i>

Q2. Facility type	Responses	Count
Independent/stand-alone	45.4%	159
Part of national or regional provider organisation	54.6%	191
<i>Total respondents answered</i>		<i>350</i>

Q3. Number of beds per facility	Responses	Count
0–25	10.8%	38
26–50	31.4%	111
51–100	41.6%	147
> 100	15.6%	55
Unknown	0.6%	2

Q4. Services provided by facility. All applicable options were selected	Count
Independent living	139
Rest home	321
Hospital level care	272
Dementia unit	135
Psychogeriatric care	23

Q5. Number of hours per week, in total, that staff are allocated to IPC in a facility	Responses	Count
< 4	37.4%	132
4–8	31.7%	112
9–20	7.7%	27
21–40	10.2%	36
Other	8.2%	29
Unknown	4.8%	17

Q6. Training or professional development the person responsible for IPC received. All applicable options were selected	Count
Trained by predecessor/manager	99
Online training course	202
Local DHB IPC team provide education	149
IPC Nurses College/DHB workshops	99
IPCNC conferences	24
International certification	28
Other	101
None	9

Q7. Top 3 training courses received
Bug Control
Ministry of Health LearnOnline
Local DHB IPC study days

Q8. Source of information related to IPC best practice. All applicable options were selected	Count
DHB guidance	309
Head/corporate office guidance	160
IPCNC website	58
Ministry of Health website	295
External IPC contractor	127
International guidance	81
Google/internet search engine	95
Other	71

Q9. Top three international IPC sources used
World Health Organization
Centers for Disease Control and Prevention
Australian Department of Health

Q10. Support networks accessed for IPC-related questions or knowledge sharing. Networks were selected and ranked	Score
DHB IPC person/team	5.09
Provider networks	4.35
Regional public health unit	4.13
DHB health of older people managers networks	4.02
External IPC contractor	3.56
None	1.47

Q11. Other support networks accessed for IPC-related questions or knowledge sharing <i>(thematic analysis from free-text comments)</i>	Count
Corporate	60
Other ARC providers	34
Consultant	27
Miscellaneous	23
DHB	14
New Zealand Aged Care Association	12
Ministry of Health	10
Care Association of New Zealand	8
New Zealand Nurses Organisation IPC	4
<i>Total respondents answered</i>	<i>137</i>

Q12. How support networks identified in the previous question were accessed. All applicable options were selected	Responses	Count
Meetings	60.8%	186
Online training	67.6%	207
Phone	70.9%	217
IPC Nurses College study days	24.5%	75
DHB-facilitated education	62.7%	192
Policy and protocol sharing	61.8%	189
Other	14.4%	44
<i>Total respondents answered</i>		<i>306</i>

Q13. Preferred channels for accessing information related to IPC best practices. Channels were selected and ranked in order of preference	Score
Website	5.47
Email	5.32
Regular IPC ARC network meetings	4.87
Webinars	4.28
Online forum	4.07
Newsletters	3.67
Bulletins	2.91

Q14. Top 3 other channels used for receiving information related to IPC best practice
Bug Control/independent consultant
Company portal for Q&A
Peer support days; networking at meetings

Q15. IPC resources a facility used for the COVID-19 response. Resources were selected and ranked	Score
Ministry of Health COVID-19 website	9.36
Organisational guidance	8.32
New Zealand Aged Care Association guidance	7.66
World Health Organization COVID-19 website	7.50
Health Quality & Safety Commission resources	6.37
Care Association New Zealand guidance	5.21
HealthCERT resources	4.97
Australian guidance	4.51
Hāpai Te Hauora Māori public health website	3.90
US Centers for Disease Control and Prevention website	3.67

Q16. Other IPC resources that a facility used for the COVID-19 response <i>(thematic analysis from free-text comments)</i>	Count
DHB guidance	22
Independent IPC consultant	19
Bug Control	18
Large provider guidance	6
Internal pandemic and IPC plans	5
Daily news/media	4
Research	4
Networking	3
Independent online resources	2
<i>Total respondents answered</i>	83

Q17. Gaps in IPC resource identified in a facility during COVID-19 planning and response. Gaps were selected and ranked in order of significance	Score
Staff knowledge about PPE donning/doffing	5.29
Staff practical application of IPC principles and what challenges have been encountered in relation to caring for those with dementia	5.04
Staff knowledge about transmission-based precautions	4.86
Outbreak management and preparedness	4.34
Application of IPC principles in a residential 'home-like' setting	3.88
Staff knowledge about general IPC practices (eg, hand hygiene, environmental cleaning, waste management, preventing indwelling catheter-associated infections, etc)	3.49
Staff knowledge about standard precautions	3.44

Q18. Other gaps in IPC resources identified in a facility during COVID-19 planning and response <i>(thematic analysis from free-text comments)</i>	Count
PPE	34
Consistent and timely communication	12
Education/training	10
Standardised, consistent guidance	8
Staffing plan	6
Applicability of IPC principles to ARC	6
DHB IPC support and collaboration; lack of understanding of ARC	5
<i>Total respondents answered</i>	<i>72</i>

Q19. Gaps in IPC resource identified across the sector during the COVID-19 planning and response. Gaps were selected and ranked in order of significance	Score
Outbreak management and preparedness	5.02
Staff knowledge about PPE donning/doffing	4.94
Staff practical application of IPC principles and what challenges have been encountered in relation to caring for those with dementia	4.73
Staff knowledge about transmission-based precautions	4.60
Application of IPC principles in a residential 'home-like' setting	4.51
Staff knowledge about general IPC practices (eg, hand hygiene, environmental cleaning, waste management, preventing indwelling catheter-associated infections, etc)	3.56
Staff knowledge about standard precautions	3.25

Q20. Other specific gaps in IPC resource identified across the sector during COVID-19 planning and response <i>(thematic analysis from free-text comments)</i>	Count
PPE	25
DHB IPC support and collaboration; lack of understanding of ARC	16
Standardised, consistent guidance	15
Staffing plan	7
Consistent and timely communication	5
Education/training	3
ARC representation in DHBs	1
<i>Total respondents answered</i>	<i>62</i>

Q21. Opportunities for improvement at a national level. Opportunities were selected and ranked in order of priority	Score
Increased collaboration with staff in other ARC facilities responsible for IPC	3.95
Increased collaboration with IPC teams in local DHBs	3.86
Capability building in quality improvement related to IPC measures	3.29
Support from regional or national level agencies regarding general IPC role and responsibilities	2.89
Support for meeting health and disability services standards for IPC	2.15

Q22. Other opportunities for improvement at a national level <i>(thematic analysis from free-text comments)</i>	Count
DHB IPC support and collaboration	22
Consistent and timely communication	19
Standardised, consistent guidance	15
Education/training	14
PPE	13
Staffing plan	7
ARC representation in DHBs	3
<i>Total respondents answered</i>	<i>80</i>

Q23. Inequities identified related to IPC practices during the COVID-19 response, in your facility (eg, ARC care vs DHB care)? <i>(thematic analysis from free-text comments)</i>	Count
PPE use, availability and cost	85
Lack of ARC understanding and support from local agencies	36
Limited staffing unable to accommodate visitors	21
Non-alignment of national and local advice	15
Education levels among staff	7
Lack of IPC support	3
Delayed process approvals	2
<i>Total respondents answered</i>	<i>135</i>

Q24. Inequities identified related to IPC practices during the COVID-19 response among the sector (eg, small vs large providers)? <i>(thematic analysis from free-text comments)</i>	Count
PPE use, availability, and cost	47
Lack of ARC understanding and support from local agencies	40
Limited staffing unable to accommodate visitors	23
Lack of IPC support	21
Non-alignment of national and local advice	15
Education/training levels among staff	2
<i>Total respondents answered</i>	<i>120</i>

Q25. IPC-specific projects or initiatives that would be valuable over the next 2–5 years. Projects/initiatives were selected and ranked in order of priority	Score
General IPC training specific to the ARC setting	5.22
Understanding and applying principles of risk assessment in IPC	4.30
General IPC training specific to the secure dementia setting	4.08
Resource tools related to IPC policies and procedures	4.01
Healthcare associated infection surveillance	2.76
Multi-drug resistance organism surveillance	1.96

Q26. Other projects or initiatives that would be valuable over the next 2–5 years <i>(thematic analysis from free-text comments)</i>	Count
IPC training/education and discussions	39
DHB support and collaboration	20
National ARC outbreak response plan	18
PPE supply and research	14
Staffing plan during outbreak	13
Guidelines for dementia units and patients	5
IPC coordinator allocation	3
<i>Total respondents answered</i>	<i>84</i>

Q27. Other important about IPC provision, in a facility, that would be important to highlight or was missing <i>(thematic analysis from free-text comments)</i>	Count
Centralised education	12
PPE updates and availability	11
Nationally coordinated and consistent information and response	10
Centralised COVID-19 guide	8
Collaboration with DHB	8
Timely communication with public	7
IPC support/contact needed	4
Staffing support needed	2
Updated Ministry of Health information easily identified	2
IPC resources and tools	2
<i>Total respondents answered</i>	<i>56</i>