Establishing the prevalence of healthcare associated infections in New Zealand hospitals (HAINZ)

National Point Prevalence Survey Methodology

Chief Investigators

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Version 2.0

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Confidential

Contents

1. Key elements of project

TITLE OF PROJECT	Establishing the prevalence of healthcare-associated infections (HAI) in New Zealand hospitals.
ABBREVIATED TITLE	Healthcare associated infections in New Zealand hospitals (HAINZ)
VERSION NUMBER	Version 2.0
SPONSOR/FUNDING BODY	Health Quality & Safety Commission New Zealand (the Commission) and DHBs through their contribution to the national HAI programme
CHIEF INVESTIGATORS	Dr Sally Roberts, national clinical lead, infection prevention & control (HQSC) Dr Arthur Morris, clinical lead for Surgical Site Infection Improvement (HQSC)
PRIMARY OBJECTIVES	To determine the prevalence of healthcare-associated infection among adult inpatients in New Zealand hospitals.
SURVEY DESIGN	A point prevalence survey (PPS) using standardised methodology based on the ECDC PPS. Definitions and descriptions of source remain consistent with the ECDC method. However, modifications in line with those developed for the Australian Comprehensive Healthcare Associated Infection National Surveillance Study (CHAINS) have been applied. The major differences are that all inpatients will be included and excludes antimicrobial use data. All patients will be assessed as to whether they have a HAI or not.
SURVEY DURATION	Based on the results from the pilot, it is anticipated that the national PPS will take four months to complete. Each DHB will take between 1-5 days depending on the number of inpatient beds. The subsequent analysis and reporting are estimated to take a similar length of time.
NUMBER OF PARTICIPANTS	All twenty DHBs have been invited to participate. Private surgical hospitals may be able to contribute to the national data set however this is unlikely to include a site visit.
HOSPITAL INCLUSION CRITERIA	All hospitals that are part of a DHB and have greater than 25 eligible inpatient beds. Rural hospitals run by GPs are excluded.

WARD INCLUSION CRITERIA	Adult General Medical and Medical Specialty (Renal, Respiratory, Oncology, Haematology, Cardiology, Gastroenterology, etc.) Adult General Surgical and Surgical Specialty (Orthopaedics, Urology, Neurosurgical, Transplant, Otorhinolaryngology (ORL), Ophthalmology, etc.) Obstetrics and Gynaecology (Maternity excludes Delivery Suites) Adult Intensive care and High Dependency Units Older Persons Health / Health and Aging / Health of Older Person Wards *(excludes HOP units off-site of main hospital)* Inpatient Assessment Treatment & Rehabilitation including Reablement Service for <65 years of age patients.
WARD EXCLUSION CRITERIA	Paediatric wards Neonatal ICU Mental Health Wards (acute and non-acute) Accident and Emergency departments Assessment & Diagnoses Unit / Clinical Decision Unit / Medical Assessment and Planning Unit Short Stay Units including Short Stay Surgical Units Day Stay Services such as Haematology and Oncology Day Stay Units and onsite Haemodialysis Units
PATIENT INCLUSION CRITERIA	All patients ≥ 18 years admitted to the ward before or at 8am on the day of the survey and not discharged from the ward at the time of survey
PATIENT EXCLUSION CRITERIA	Patients < 18 years of age (in any hospital ward or unit) Patients undergoing same-day treatment or surgery
OUTCOME MEASURES	To estimate the total prevalence of HAIs among inpatients aged ≥ 18 in New Zealand hospitals. To describe the HAIs by infection site, patient demographics, medical/surgical specialty, hospital size and type of facility, and level of clinical services provided. To report on device utilisation rates.
RECRUITMENT & ENGAGEMENT	A letter was sent to the DHB chief executives on 7 December 2020 requesting confirmation of participation and nomination of a local PPS Lead.
DATA COLLECTION	A standardised set of data will be collected on all patients. Data will be entered by the National PPS team who will be trained in the data collection methodology, use of the data collection tool and application of HAI definitions. DHB staff are needed to support the national PPS team by assisting the data collectors with finding the survey data in the electronic and paper record. Verification will be undertaken at each DHB.
STATISTICAL ANALYSES	Analysis of the data and application of statistical methods will be performed by the Commission's Health Quality Intelligence team.
DISSEMINATION	The Commission will communicate a dissemination plan that will include communication strategies for all stakeholders, a publication plan, and presentations at national and international conferences.

2. Abbreviations

A&E	Accident and Emergency Department
BSI	Bloodstream infection
CDC	Centre for Disease Control and Prevention
CI	Chief Investigator
CLAB	Central line associated bacteraemia
DHB	District Health Board
ECDC	European Centre for Disease Control and Prevention
FTE	Full-time Equivalent
HAI	Healthcare associated infection
HQSC	Health Quality & Safety Commission New Zealand
ICU	Intensive care unit
IPC	Infection Prevention & Control
NHSN	National Healthcare Safety Network
PM	Project manager
PPS	Point prevalence survey
QI	Quality Improvement
RA	Research Assistant
SSI	Surgical site infection
PSH	Private Surgical Hospital

3. Funding

The National HAI PPS will be funded by the Commission, as a priority project within the IPC Programme in 2020/2021. The IPC programme is joint funded by all 20 DHBs in NZ under the current population-based funding formula.

4. National PPS team

The roles and responsibilities of the PPS team are outlined in Table 1, below.

Name	Organisation	Role	Responsibility and contribution
Dr Sally Roberts	ADHB	Chief Investigator	Project sponsor, clinical leadership
Dr Arthur Morris	ADHB	Chief Investigator	Clinical leadership
Nikki Grae	HQSC	Acting Senior Manager, Infection Prevention & Control	Clinical expertise IPC, planning & management

Barbara Gibson	HQSC	Senior Advisor, Infection Prevention & Control	Clinical expertise IPC, planning & management
Ashvindev Singh	HQSC	Project lead & Quality Improvement Advisor, Hospital Improvement	Project Lead & Management
Emily Mountier	HQSC	Data Analyst	All data support
Andrea Flynn	HQSC	Project Management support	Project Management & support the project lead in planning and managing the project
Ruth Barratt	HQSC	HAI PPS Surveyor	Data collection
Claudia Williams	HQSC	HAI PPS Surveyor	Data collection

5. Background

HAIs cause increased morbidity and mortality, increased length of hospital stay, and excess health costs. Many are considered preventable, however the development of effective prevention strategies requires an understanding of how, why and where they are occurring. Surveillance to identify the type and prevalence of HAI is an essential component of local, regional and national infection prevention programmes.

Most countries with complex healthcare systems have developed national HAI surveillance programmes to improve their understanding of HAIs and how to prevent them. The European Centre for Disease Prevention and Control (ECDC) standardised methodology for HAI PPS has been tested extensively with reliable outcomes and administered twice since 2010 across 29 European countries. This has enabled the ECDC to report on the total burden of HAIs in acute care hospitals throughout the EU, and to collect and report on types of patients, invasive procedures, and infections, as well as to describe key structures and processes for the prevention of HAIs at the hospital and ward level. Results are disseminated at a local, regional, and national level to raise awareness, improve surveillance structures and skills, identify common problems, set up priorities appropriately, and evaluate the effect of strategies and policy decisions.

New Zealand DHBs currently collect and report on HAI data on healthcare associated *Staphylococcus aureus* bloodstream infections and surgical site infections following hip and knee replacement and cardiac surgeries. In addition, the central line associated bacteraemia (CLAB) collaborative, which was established by the Commission in 2011, reduced the incidence of CLAB in intensive care units to one-tenth of its previous level. While these programmes provide valuable data, the national burden of HAI is currently unknown in New Zealand.

A national PPS is a cost-effective means of providing a ‘snapshot’ of HAI to estimate the total HAI burden. The findings can be used to identify priority areas for action and inform infection prevention recommendations and policy direction. The New Zealand HAI PPS will utilise ECDC methodology as modified by the Singaporean and Australian PPS. It will generate national data on HAI prevalence and provide reliable estimates to inform policy and identify national, regional, and local HAI prevention priorities.

6. Objectives

The objectives of the New Zealand HAI PPS in hospitals are:

1. To estimate the total prevalence of HAIs among inpatients aged ≥18 in New Zealand hospitals
2. To understand the burden of HAI in New Zealand hospitals to inform future QI activities
3. To determine ethnicity disparities related to HAIs and device utilisation in New Zealand hospitals.

7. Methods

7.1 Survey design

The national PPS uses the ECDC standardised methodology modified for New Zealand. There are two triggers for HAI – the patient is on antibiotics or the patient has a fever >38C.

7.2 Setting and participants

All DHBs have been requested to participate. The PPS involves visiting each eligible hospital within the DHB. The PPS has been piloted at Counties Manukau, Auckland, Nelson-Marlborough and Lakes DHBs along with Southern Cross Hospital, Wellington.

7.3 Eligible patients within each hospital

All adult inpatients within the hospital at 8am on the day of the survey. This includes:

In scope	• Adult General Medical and Medical Specialty (Renal, Respiratory, Oncology, Haematology, Cardiology, Gastroenterology, etc.) • Adult General Surgical and Surgical Specialty (Orthopaedics, Urology, Neurosurgical, Transplant, Otorhinolaryngology (ORL), Ophthalmology, etc.) • Obstetrics and Gynaecology (Maternity excludes Delivery Suites) • Adult Intensive care and High Dependency Units • Older Persons Health / Health and Aging / Health of Older Person Wards *(excludes HOP units off-site of main hospital)* • Inpatient Assessment Treatment & Rehabilitation including Reablement Service for <65 years of age patients.
Out of scope	• Paediatric wards • Neonatal ICU • Mental Health Wards (acute and non-acute) • Accident and Emergency departments • Assessment & Diagnoses Unit / Clinical Decision Unit / Medical Assessment and Planning Unit • Short Stay Units including Short Stay Surgical Units • Day Stay Services such as Haematology and Oncology Day Stay Units and onsite Haemodialysis Units

7.4 Ethics & privacy

This project meets the requirements of a Quality Improvement project and whilst ethical approval is not considered necessary an 'Out of Scope' application has been submitted to Health and Disability Ethics Committee (HDEC). A reply has been received from HDEC confirming the study will not require submission to HDEC (Appendix 1). This will provide reassurance to any participating hospitals that the appropriate approval process has been followed for this project.

A Privacy Impact Assessment has been completed and approved by the Northern Region Information Governance and Privacy Group. DHBs participating in the pilot reviewed and endorsed the PIA and each hospital will be provided a copy of the PIA for their review and endorsement as part of the full implementation.

7.5 Data collection

Members of the National PPS team will enter data to complete the survey. Each visit will include 2-4 data collectors. The DHB will need to support the collection of data by providing staff to work alongside the data collectors to facilitate access to all wards and assist with finding the necessary data such as medical records, pathology results and radiology results. Ideally the staff will have IPC expertise, but this is not essential.

7.6 Training of data collectors

The National PPS team will be trained in the PPS data collection methodology and data collection tool. There will be competency assessments prior to implementation of the national PPS and ongoing validation of data.

7.7 Data entry

A secure online platform, REDCap, will be used for direct data entry via a tablet or laptop. Basic patient data will be provided by each individual DHB to the Commission via a secure file transfer software on the day of the survey. This will then be uploaded securely into REDCap.

Further data will be entered into REDCap through a VPN connection, using a mobile device, and will be stored in a database hosted on a local server at the Commission. No data will be stored on the mobile device.

7.8 Overview of collected data

The ECDC Protocol was reviewed and adapted for the New Zealand context in keeping with the modifications made by the Australian (CHAINS) study. Inclusive of patient and hospital data, device data will also be collected to identify utilisation rate and presence of HAI. The data fields that will be collected are shown in Appendix 2 and 3.

7.9 Data Validation/verification

Data validation occurs at every DHB where there are two or more data collection teams. Validation patients are selected randomly from defined wards.

All HAI cases will be discussed and confirmed at the end of each day with a lead investigator.

7.10 Data analysis

Based on the data collected, the prevalence of HAI will be estimated from the proportion of patients with infection HAI. Further analysis of the collected data will be undertaken by the Commission's Health Quality Intelligence Team. An analysis plan will be developed.

7.11 Definitions

A full set of infection definitions are available. Refer to NZ PPS manual.

8 Steering group/expert advice

An internal steering group is advising the project along with informal advice from the CHAINS team who undertook a PPS in Australia. Meetings are as required and at key times during the project.

9 Monitoring

The National PPS team and on-site survey team at each hospital will monitor the data collection processes.

Support (video conference, telephone and email contact) will be provided during the preparation for the site visit for each DHB.

9.1 Adverse event reporting

In the absence of an intervention we have interpreted an adverse event to be a clinical issue related to the delivery of patient care. If there are any clinical concerns raised during this review, then the hospital-based clinician will be asked to address this with the relevant medical/surgical team at that DHB.

A record of all adverse events identified will be reported.

9.2 Incident monitoring and reporting

We have defined an incident as an event occurring during the collection of patient data by the survey team or any other event arising during the survey teams time at a DHB hospital or PSH.

An example may be a member of the clinical team at a DHB or PSH raising concerns about a breach of patient privacy by one of the survey team members during their review of the medical record. Information will be available to provide to the staff member to reassure them that the correct process has been followed. All such events will be captured, and the response recorded.

10 Intellectual property

All Intellectual Property generated through the project will rest with the Commission.

11 Safety

The following will be used to evaluate the safety of staff involved in the survey:

- Regular review and evaluation of all adverse events
- Regular review and evaluation of all incidents.

12 Dissemination

- Communication strategy for all stakeholders
- Reporting back to DHBs
- Publications specific to the outcomes
- Presentations at national and international conferences consistent with the publication strategy

Appendix 1 – HDEC letter

Health and Disability Ethics Committees

Health and Disability Ethics Committees
Ministry of Health
133 Molesworth Street
PO Box 5013
Wellington
6011

0800 4 ETHICS hdecs@moh.govt.nz

14 August 2020

Dr Sally Roberts
Department of Microbiology, LabPlus
Auckland District Health Board
Park Road, Grafton, Auckland

Dear Dr Roberts,

Study title:	Health Quality & Safety Commission's Healthcare associated Infection Point Prevalence Survey

Thank you for emailing HDEC a completed scope of review form on 03 August 2020. Secretariat has assessed the information provided in your form and supporting documents against the Standard Operating Procedures.

Your study will not require submission to HDEC, as on the basis of the information you have submitted, it does not appear to be within the scope of HDEC review. This scope is described in section three of the Standard Operating Procedures for Health and Disability Ethics Committees.

As your study is an Audit or related activity it does not require HDEC review as it does not involve the use, collection, or storage of human tissue without consent (paragraph 33 of the Standard Operating Procedures for Health and Disability Ethics Committees).

If you consider that our advice on your project being out of scope is in incorrect please contact us as soon as possible giving reasons for this.

This letter does not constitute ethical approval or endorsement for the activity described in your application, but may be used as evidence that HDEC review is not required for it.

Please note, your locality may have additional ethical review policies, please check with your locality. If your study involves a DHB, you must contact the DHB's research office before you begin. If your study involves a university or polytechnic, you must contact its institutional ethics committee before you begin.

Please don't hesitate to contact us for further information.

Yours sincerely,

Tristan Katz
Advisor
Health and Disability Ethics Committees
hdecs@moh.govt.nz
Out of Scope – HDEC email submission

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Appendix 2 – Survey questions

Part 1 Demographics

Adding new Patient NHI: **ABC1234**

Patient NHI:	ABC1234
Subject unique identifier: _____-_____-_____	
1. Details of Current PPS	
Date of survey: * must provide value	Today D-M-Y
Time of survey: * must provide value	Now H:M
Hospital code: * must provide value	
Ward code: * must provide value	
Patient number assigned in current PPS: * must provide value	Please use a minimum of 3 digits (e.g. 005, 012)
Encounter (visit) number: * must provide value	
Patient's medical records are available during the time of surveillance * must provide value	○ Yes, continue survey ○ No, end survey reset
3. Patient Demographics	
Sex: * must provide value	○ Male ○ Female ○ Other/Unknown reset
Date of birth: * must provide value	Today D-M-Y
Age:	View equation Note this field will auto-generate a number
Ethnicity: * must provide value	

4. Admission Details

Date of admission:
* must provide value

Today D-M-Y

Admission type
* must provide value

- ○ Emergency
- ○ Elective

Ward specialty:
* must provide value

Main ward specialty (>80% of patients requiring this specialty). If unsure, this information can be obtained by asking the Nurse Manager of the ward

Consultant specialty:
* must provide value

Peripheral vascular access device present
* must provide value

- ○ Yes
- ○ No

Central vascular access device present
* must provide value

- ○ Yes
- ○ No

Indwelling urinary catheter present
* must provide value

- ○ Yes
- ○ No

Undergoing ventilation
* must provide value

- ○ Yes
- ○ No

Has the patient had surgery (w/o implants) within 30 days from current admission (including surgery this admission)?

- ○ Yes
- ○ No

Has the patient have surgery (WITH IMPLANTS) within 90 days from current admission (including surgery this admission)?

- ○ Yes
- ○ No

Does the patient have an active alert for an multi drug resistant organism?
* must provide value

- ○ Yes
- ○ No

Receiving antimicrobial therapy excluding surgical prophylaxis * must provide value	○ Yes ○ No Include if therapy is received >24 hours post surgery. Surgical prophylaxis is commonly cefazolin or bactrim (trimethoprim+sulfamethoxazole 80+400mg), one tablet orally daily OR bactrim DS (trimethoprim+sulfamethoxazole 160+800mg), one tablet orally - daily or three times per week
Documented fever >38C in last 24 hours * must provide value	○ Yes ○ No
If patient presented to hospital within the last 48 hours, have they been discharged from a hospital within 48 hours prior to presentation, or had surgery within the last 30 days or surgery with an implant within 90 days, or had a device (CVC, PIVC, IDC) inserted during this admission, or had a positive result for *Clostridioides difficile* toxin during this admission? * must provide value	○ Yes or N/A ○ No, end survey
Form Status	
Complete?	Incomplete
	Save & Exit Form Save & Stay -- Cancel --

Where the patient meets the screen criteria the following questions are answered.

Part 2 Hai Algorithm

Adding new Patient NHI: **ABC1234**

Patient NHI:	ABC1234
1. Surgical Site Infection	
1(a). Did the patient have surgery within 30 days from current admission (including surgery done this admission)? * must provide value	○ Yes ○ No reset
1(b).Did the patient have surgery within 90 days from current admission (including surgery done this admission) with implant in place? * must provide value	○ Yes ○ No reset
2. Pneumonia or other Lower Respiratory Tract Infection	
2(a). Does the patient have any underlying cardiac or pulmonary disease (heart failure, COPD, bronchiectasis etc)? * must provide value	○ Yes ○ No reset
2(b). Does the patient present with any of the symptoms? * must provide value	☐ Purulent sputum ☐ Cough, shortness of breath (dyspnea) or respiratory rate > 25/min (tachypnoea) ☐ Increased breath sounds, rales, ronchi or wheezing ☐ Episode of desaturation or increasing oxygen demands ☐ None of the above
3.Lung Abscess or Lung Tissue Infection	
3(a). Does the patient present with any of the signs or symptoms of lung tissue infection? * must provide value	☐ Organisms seen on smear (Gram stain) or culture from lung fluid or tissue ☐ Lung abscess or empyema seen on surgery ☐ Lung abscess cavity seen on radiographic lung examination ☐ None of the above

4.Urinary Tract Infection (UTI)	
4(a). Does the patient present with any of the signs or symptoms? * must provide value	☐ Fever >38C ☐ Urinary urgency ☐ Urinary frequency ☐ Pain passing urine (dysuria) ☐ Suprapubic tenderness ☐ Costovertebral angle pain or tenderness ☐ None of the above
5.Skin and Soft Tissue Infection	
5(a). Does the patient have any symptoms of a skin/soft tissue infection (e.g. pain, swelling, redness), or did the attending physician mentioned the possibility of a skin/soft tissue infection? * must provide value	○ Yes ○ No reset
6. Bone and Joint Infection	
6(a). Does the patient have any symptoms of a bone/joint infection (e.g. joint pain or tenderness, swelling, pain at the vertebral disc space), or did the attending physician mentioned the possibility of a bone/joint infection? * must provide value	○ Yes ○ No reset
7. Gastroenteritis	
7(a). Does the patient present with the symptoms stated? * must provide value	○ Acute onset of diarrhea (liquid stools for > 12h) and non-infectious causes ruled out by physicians ○ No, the patient did not present with the above symptom reset
8.Gastrointestinal Tract Infection (excluding gastroenteritis)	
8(a). Does the patient meet any of the following criteria? * must provide value	☐ Abscess or evidence of infection seen during surgery or histopathologic examination ☐ Organisms cultured from purulent material from intra-abdominal space during a surgical operation/procedure ☐ None of the above

9. *Clostridium difficile* Infection

9(a). Which of these is true for this patient?
* must provide value

- ☐ Patient have toxic megacolon or diarrhea AND positive *C. difficile* toxin A or B in stools
- ☐ Patient has pseudomembranous colitis as revealed by lower gastrointestinal endoscopy
- ☐ Patient has colonic histopathology characteristic of *C. difficile* infection during endoscopy
- ☐ None of the above

10.Central Nervous System Infection

10(a). Does the patient have any symptoms of a central nervous system infection, or did the attending physician mentioned the possibility of a central nervous system infection?
* must provide value

- ○ Yes
- ○ No

reset

11.Eye, Ear, Nose, Throat or Mouth Infection

11(a). Did the attending physician mention the possibility of an eye, ear, nose, throat or mouth infection?
* must provide value

- ○ Yes
- ○ No

reset

12.Cardiovascular System Infection

12(a). Does the attending physician mention the possibility of a cardiovascular infection (e.g. artery or vein infection, endocarditis, myocarditis, pericarditis or mediastinitis)?
* must provide value

- ○ Yes
- ○ No

reset

13.Central or Peripheral Vascular Catheter-Related Infection

13(a). Does patient have a CVC or PVC inserted this admission?
* must provide value

- ☐ CVC
- ☐ PVC
- ☐ No, neither CVC or PVC was inserted this admission

14(a). Does patient have positive blood culture during this admission, AND on antimicrobial treatment currently or with symptoms presently?

- ○ Yes
- ○ No

reset

15. Unspecified sepsis (Do not use this unless infection really does not fall under all other case definitions)

15(a). Does the patient present with any of the symptoms?

- ☐ Fever (>38C)
- ☐ Hypotension (systolic BP < 90mmHg)
- ☐ Oliguria (< 20ml per hour)
- ☐ None of the above

16. Other hospital-acquired infection.

Including non-conjunctivitis eye infections, hepatitis, breast abscess or mastitis, disseminated infection and reproductive tract infections (such as endometritis, episiotomy, vaginal cuff etc)

Type of infection:

Please include definition-meeting criteria for this infection.

Form Status

Complete? Incomplete

Save & Exit Form | Save & Stay

-- Cancel --

Part 3 Hai Details

Editing existing Patient NHI: **ABC1234**

Patient NHI:	ABC1234
Summary of Active HAIs	
The patient has the following HAIs as listed. Pls enter the details of each HAI below.	
____	
The total number of HAIs listed above is:	1
Details - Hospital Acquired Infection 1	
Select the HAI code of interest.	
Is the HAI secondary to a surgical site infection and details have been entered under the previous surgical site infection codes (SSI-S, SSI-D, SSI-O)?	☐ Yes, this HAI is secondary to a surgical site infection and details of the infection has been filled in above ☑ No, the above criteria is not met
Date of HAI onset:	Today D-M-Y
State the number of microorganisms isolated, pertaining to this specific HAI.	
Completion of Survey	
Time of PPS completion	Now H:M
Surveyor's Initials: * must provide value	
Additional comments:	
Form Status	
Complete?	Incomplete

Save & Exit Form | Save & Stay

-- Cancel --

Delete data for THIS FORM only

NOTE: To delete the entire record (all forms/events), see the record action drop-down at top of the Record Home Page.

Appendix 3 – Device collection

Health Quality & Safety Commission HAI Point Prevalence Survey – device collection template	Date collected:
Ward/Unit:	Collected by:

Instructions: Before 0800 on the morning of the survey, please complete the columns in this table for ALL patients on the ward (except the last 3 columns).
A member of the PPS team will collect this upon arrival to ward.

Ward team to complete												*This section to be completed by PPS team*		
		Devices (list number for each device)										PPS triggers		
			Central line				IDC		Ventilator					
Patient Sticker	Bed number	Peripheral IV line	*Tunnelled*	*Non-tunnelled*	*PICC*	*Subcutaneous (Implanted) port*	*Urethral*	*Suprapubic*	*Invasive*	*Non-invasive*	No devices present (tick)	Fever (>38.0°C) since 8am previous day? If Yes, specify date of 1st fever	Antibiotic therapy (excluding surgical prophylaxis)	Complete in REDCap?
Patient sticker here														
Patient sticker here														
Patient sticker here														
Patient sticker here														

Appendix 4 – Case follow-up

Case follow-up

DHB/Hospital: _____ Survey date: _____

Point Prevalence Surveyor: _____ DHB contact: _____

Patient NHI: _____ Patient Surname: _____

Ward: _____ Potential HAI: _____

Specimen type: _____ Specimen number/code: _____

Specimen collection date: _____ Specimen result date: _____

Specimen result: _____

Notes:

Patient NHI: _____ Patient Surname: _____

Ward: _____ Potential HAI: _____

Specimen type: _____ Specimen number/code: _____

Specimen collection date: _____ Specimen result date: _____

Specimen result: _____

Notes: