

## 8 APPENDIX B - Data Definitions

### 8.1 *Ward Selection form*

<b>Data item</b>	<b>Ward name</b>
<b>Response</b>	Alpha numeric
<b>Classification</b>	Required
<b>Definition</b>	Ward in which patient's bed is located
<b>Choices</b>	No choices
<b>Rationale</b>	Required to check sampling strategy is followed
<b>Data item</b>	<b>Hospital name</b>
<b>Response</b>	Alpha numeric
<b>Classification</b>	Required
<b>Definition</b>	Hospital where survey is taking place
<b>Choices</b>	No choices
<b>Rationale</b>	Required for reporting of hospital HAI rates
<b>Data item</b>	<b>Official (administrative) speciality of ward 1,2,3,4</b>
<b>Response</b>	Text from drop-down menu
<b>Classification</b>	At least one item required, four possible
<b>Definition</b>	Administrative speciality of ward/ Defined speciality/ies of patients in ward
<b>Choices</b>	Select from drop down list (see appendix B1, list 1 for choices)
<b>Rationale</b>	Required for description of ward Required to establish risk of HAI in ward
<b>Source Hierarchy</b>	Nurse in charge → other nursing staff on ward

## 8.2 Ward Census

<b>Data item</b>	<b>Ward Name</b>
<b>Response</b>	Text
<b>Classification</b>	Required but pulled from ward details
<b>Definition</b>	Ward in which survey being undertaken
<b>Choices</b>	Select from list of wards entered
<b>Rationale</b>	Required to check that hospital sampled

<b>Data item</b>	<b>Hospital</b>
<b>Response</b>	Text
<b>Classification</b>	Required but pulled from ward details
<b>Definition</b>	Hospital in which survey being undertaken
<b>Choices</b>	No choices
<b>Rationale</b>	Required to check that hospital is sampled

<b>Data item</b>	<b>Speciality</b>
<b>Response</b>	Text
<b>Classification</b>	Required but pulled from ward details
<b>Definition</b>	Speciality of ward in which survey being undertaken
<b>Choices</b>	Pulled from ward details
<b>Rationale</b>	Required to check that hospital sampled

<b>Data item</b>	<b>Survey</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Survey in which patient included i.e. <i>Burden or Extended Prevalence</i>
<b>Choices</b>	Burden Prevalence
<b>Rationale</b>	Required to signal which component of the survey the patient data will be analysed in and to ensure additional data for the burden survey is collected

<b>Data item</b>	<b>Date of census</b>
<b>Response</b>	Numerical Date frame
<b>Classification</b>	Required
<b>Definition</b>	Date on which survey undertaken in that ward
<b>Choices</b>	DD/MM/YYYY. If the information is not available the Default date is 01/01/9998, and will be excluded from analysis.
<b>Rationale</b>	Required record of date of survey in that ward

<b>Data item</b>	<b>Time of census</b>
<b>Response</b>	Numeric (24 hour clock)
<b>Classification</b>	Required
<b>Definition</b>	Time at which eligible In Patient (IP) beds are sampled
<b>Choices</b>	No choices
<b>Rationale</b>	Required to establish exact time beds in ward surveyed

<b>Data item</b>	<b>Beds occupied by inpatients at time of survey</b>
<b>Response</b>	Numeric
<b>Classification</b>	Required
<b>Definition</b>	Number of beds occupied by eligible patients
<b>Choices</b>	No choices
<b>Rationale</b>	Required to calculate HAI rates

<b>Data item</b>	<b>Beds occupied by patients staying for &lt;24 hrs</b>
<b>Response</b>	Numeric
<b>Classification</b>	Required
<b>Definition</b>	Number of beds occupied by ineligible patients
<b>Choices</b>	No choices
<b>Rationale</b>	Required to calculate HAI rates

<b>Data item</b>	<b>Unoccupied beds at time of census</b>
<b>Response</b>	Numeric
<b>Classification</b>	Required
<b>Definition</b>	Number of beds unoccupied at time of census
<b>Choices</b>	No choices
<b>Rationale</b>	Required to check on calculation of HAI rates
<b>Reply</b>	Numeric

<b>Data item</b>	<b>Total available beds at time of census</b>
<b>Response</b>	Numeric – Should be equal to sum of 3 fields above
<b>Classification</b>	Required/Validation check
<b>Definition</b>	Bed complement of the ward.  If ‘unfunded beds’ are sometimes used and are occupied by for example private patients who are potentially at risk then they should be included in the total.
<b>Choices</b>	No choices.
<b>Rationale</b>	Needed for calculation of HAI prevalence rate

<b>Data item</b>	<b>Number of trained NHS nursing staff on duty</b>
<b>Response</b>	Numeric
<b>Classification</b>	Required
<b>Definition</b>	Number of <b>registered</b> NHS nursing staff on duty for the shift (including bank staff employed by the hospital)
<b>Choices</b>	No choices
<b>Rationale</b>	Required to calculate patient/nurse ratio

<b>Data item</b>	<b>Number of untrained NHS nursing staff on duty</b>
<b>Response</b>	Numeric
<b>Classification</b>	Required
<b>Definition</b>	Number of <b>unregistered</b> NHS nursing staff on duty for the shift (including bank staff employed by the hospital)
<b>Choices</b>	No choices
<b>Rationale</b>	Required to calculate patient/nurse ratio

**Data item** **Number of trained agency nursing staff on duty**  
**Response** Numeric  
**Classification** Required  
**Definition** Number of **registered** agency nursing staff on duty for the shift  
**Choices** No choices  
**Rationale** Required to calculate patient/nurse ratio

**Data item** **Number of untrained agency nursing staff on duty**  
**Response** Numeric  
**Classification** Required  
**Definition** Number of **unregistered** agency nursing staff on duty for the shift  
**Choices** No choices  
**Rationale** Required to calculate patient/nurse ratio

**Data item** **Number of student nursing staff**  
**Response** Numeric  
**Classification** Required  
**Definition** Number of **student nursing staff** on duty for the duration of the shift  
**Choices** No choices  
**Rationale** Required to calculate patient/nurse ratio

**Data item** **Comments on data collection**  
**Response** Text field  
**Classification** Not Required  
**Definition** Data collectors comments on how data collection has gone in that ward and a chance to record additional information.  
**Choices** No choices, free text field  
**Rationale** To identify successes and difficulties in data collection and allow any additional patient information to be recorded

<b>Data item</b>	<b>Form completed by</b>
<b>Response</b>	Alphanumeric
<b>Classification</b>	Automatically assigned by username login
<b>Definition</b>	Name of data collector completing the Ward Form
<b>Choices</b>	No choices
<b>Rationale</b>	Required for development of methodology of survey

## 8.3 Patient Details

<b>Data item</b>	<b>Is patient a Lodger on ward detailed above?</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	If patient is lodging in ward and is undergoing care from speciality different from normal speciality of ward
<b>Choices</b>	No choices
<b>Rationale</b>	Required for calculation of speciality specific rates

<b>Data item</b>	<b>Hospital Speciality responsible for patient care</b>
<b>Response</b>	Alpha numeric
<b>Classification</b>	Required
<b>Definition</b>	Speciality of consultant under whose care patient is <u>currently</u>
<b>Choices</b>	Select from drop down list created from new ward form Up to 4 possible choices
<b>Rationale</b>	Required for calculation of speciality specific rates
<b>Source Hierarchy</b>	Medical notes→ Nursing staff

<b>Data item</b>	<b>Patient hospital number or code given to patient locally</b>
<b>Response</b>	Alpha numeric
<b>Classification</b>	Required
<b>Definition</b>	Patient hospital number or code given to patient locally
<b>Choices</b>	No choices
<b>Rationale</b>	Required for quality checking and retrieval length of stay data

<b>Data item</b>	<b>Patients Bed Number</b>
<b>Response</b>	Numeric
<b>Classification</b>	Required
<b>Definition</b>	Patient's bed number as allocated by the hospital
<b>Choices</b>	No choices. Free text. R1B1 (room 1 bed 1) R1B2 (room 1 bed 2) R2B1 (room 2 bed 1) R2B2 (room 2 bed 2) and so on.
<b>Rationale</b>	Required to check on completeness of sampling

<b>Data item</b>	<b>Patient date of birth</b>
<b>Response</b>	Numeric Date Frame
<b>Classification</b>	Required
<b>Definition</b>	Patient's date of birth
<b>Choices</b>	DD/MM/YYYY. If the information is not available the Default date is 01/01/9998, and will be excluded from analysis.
<b>Rationale</b>	Required for age specific rate reporting and for modelling

<b>Data item</b>	<b>Gender</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Sex of patient
<b>Choices</b>	Male Female
<b>Rationale</b>	Required for modelling of rates

<b>Data item</b>	<b>Date patient was admitted to this hospital</b>
<b>Response</b>	Numeric Date frame If exact date is not documented record as 01/01/9998
<b>Classification</b>	Required
<b>Definition</b>	Date patient was admitted to <u>this</u> hospital
<b>Choices</b>	DD/MM/YYYY. If the information is not available the Default date is 01/01/9998, and will be excluded from analysis.
<b>Rationale</b>	Required to estimate duration of stay in Burden survey
<b>Source Hierarchy</b>	Admission forms→ward clerk→ward register→admissions register→medical notes

<b>Data item</b>	<b>Patient was transferred from another hospital</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether patient admitted from another hospital
<b>Choices</b>	Yes No
<b>Rationale</b>	To examine the frequency of HAI in transferred patients

**Data item** **From ward**  
**Response** Radio Button  
**Classification** Required  
**Definition** Whether patient admitted from ward (not ICU) at another hospital  
**Choices** Yes  
No  
**Rationale** To examine the frequency of HAI in patients transferred into this hospital

**Data item** **From ICU**  
**Response** Radio Button  
**Classification** Required  
**Definition** Whether patient admitted from ICU at another hospital  
**Choices** Yes  
No  
**Rationale** To examine the frequency of HAI in patients transferred from ICU at another hospital.

**Data item** **Transferred to ward from own ICU**  
**Response** Radio Button  
**Classification** Required  
**Definition** Whether patient admitted to ward from own ICU or HDU if both in the same physical location  
**Choices** Yes  
No  
**Rationale** To examine the frequency of HAI in patients transferred from ICU

**Data item** **Patient was transferred from Care home**  
**Response** Radio Button  
**Classification** Required  
**Definition** Whether patient admitted from residential or nursing home  
**Choices** Yes  
No  
**Rationale** To examine the frequency of HAI in transferred patients

<b>Data item</b>	<b>Admission type</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether admission planned or unplanned using the COPPISH codes.
<b>Choices</b>	Planned Unplanned
<b>Rationale</b>	To examine the proportion of infection by type of admission

<b>Data item</b>	<b>Comments on data collection</b>
<b>Response</b>	Text field
<b>Classification</b>	Not Required
<b>Definition</b>	To allow data collector to add individual comments/notes on each patient if required
<b>Choices</b>	No choices, free text field. <u>NB</u> do not use a hard return in this field.
<b>Rationale</b>	To allow data collector to record additional information on the patient or data collection.

<b>Data item</b>	<b>Date</b>
<b>Response</b>	Required but pulled from database
<b>Classification</b>	Required
<b>Definition</b>	Date record was recorded
<b>Choices</b>	No choices
<b>Rationale</b>	To record date record was entered on the database

## 8.4 Infection

<b>Data items</b>	<b>HAI</b>
<b>Response</b>	Single
<b>Classification</b>	Conditionally required
<b>Definition</b>	Type of HAI
<b>Choices</b>	Selection from drop down list (see appendix B I, list 2)
<b>Infection Rationale</b>	Required to calculate rates of individual HAI

## 8.5 Microbiology

<b>Data item</b>	<b>Microbiology specimen(s) status</b>
<b>Response</b>	Radio Button
<b>Definition</b>	Whether specimen sent for microbiological examination
<b>Choices</b>	Positive Awaited
<b>Rationale</b>	To examine microbiology of HAI

<b>Data item</b>	<b>Organisms identified/isolated/cultured</b>
<b>Response</b>	Alphanumeric code
<b>Classification</b>	Required (up to 4 can be entered)
<b>Definition</b>	Organism identified/isolated from that specimen
<b>Choices</b>	Selection from drop down list (see appendix B1, list 3)

<b>Data item</b>	<b>Other organism</b>
<b>Response</b>	Text
<b>Classification</b>	Conditionally required if organism not in drop down list
<b>Definition</b>	Organism for which antibody test is positive
<b>Choices</b>	User enters text
<b>Rationale</b>	To examine microbiology of HAI

## 8.6 Surgery

<b>Data item</b>	<b>Has patient had surgery within the last year</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether patient has had surgery in the last year
<b>Choices</b>	Yes No
<b>Rationale</b>	Required to detect HAI in patients who have undergone surgery

<b>Data item</b>	<b>Has patient been readmitted with an SSI</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether patient has been readmitted with an SSI
<b>Choices</b>	Yes No
<b>Rationale</b>	Required to detect post-operative HAI in patients who have undergone surgery

<b>Data item</b>	<b>Patient has had surgery without implant in year preceding survey</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether patient has had surgery without implant in preceding year
<b>Choices</b>	Yes No
<b>Rationale</b>	Required to detect post-operative HAI in patients without implants

**Data item**                    **OPCS Code**  
**Response**                    Alphanumeric  
**Classification**                Conditionally required (up to 3 operations can be added)  
**Definition**                    OPCS code of operation(s) performed  
**Choices**                        Selection from drop down list (see appendix B1, list 4)  
**Rationale**                      To examine relation between HAI and operation type

**Data item**                    **Date of surgery**  
**Response**                    Alphanumeric Date frame  
**Classification**                Required  
**Definition**                    Date operation(s) performed  
**Choices**                        DD/MM/YYYY. If the information is not available the Default date is 01/01/9998, and will be excluded from analysis.  
**Rationale**                      To record date of operation

**Data item**                    **Other OPCS Code**  
**Response**                    Text  
**Classification**                Conditionally required  
**Definition**                    OPCS code of operation(s) performed  
**Choices**                        User enters text

**Data item**                    **Surgery with implant in last year**  
**Response**                    Radio Button  
**Classification**                Required  
**Definition**                    Whether patient has had surgery with implant in the previous year  
**Choices**                        Yes  
    No  
**Rationale**                      Required to detect post-operative HAI in patients with implant surgery

<b>Data item</b>	<b>OPCS Code</b>
<b>Response</b>	Alphanumeric
<b>Classification</b>	Conditionally required (up to 3 operations can be added)
<b>Definition</b>	OPCS code of operation(s) performed
<b>Choices</b>	Selection from drop down list (same as previous list)
<b>Rationale</b>	To examine relation between HAI and operation type

<b>Data item</b>	<b>Other OPCS Code</b>
<b>Response</b>	Text
<b>Classification</b>	Conditionally required if surgery not in drop down list
<b>Definition</b>	OPCS code of operation(s) performed
<b>Choices</b>	User enters text

<b>Data item</b>	<b>Date of surgery</b>
<b>Response</b>	Alphanumeric Date frame
<b>Classification</b>	Required
<b>Definition</b>	Date operation(s) performed
<b>Choices</b>	DD/MM/YYYY. If the information is not available the Default date is 01/01/9998, and will be excluded from analysis.
<b>Rationale</b>	To record date of operation

## 8.7 Antibiotics/Antifungals/Antivirals

<b>Data item</b>	<b>Patient is Currently receiving Antibiotic Therapy</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether the patient is <u>currently</u> on antimicrobial treatment.
<b>Choices</b>	Yes No
<b>Rationale</b>	To examine the prevalence of antibiotic treatment

<b>Data item</b>	<b>Antibiotic</b>
<b>Response</b>	Alphanumeric
<b>Classification</b>	Conditionally required
<b>Definition</b>	Name of antibiotic which patient is taking
<b>Choices</b>	Antibiotic names from drop down list (see Appendix B1, list 5)

<b>Data item</b>	<b>Method of administration</b>
<b>Response</b>	Alphanumeric
<b>Classification</b>	Conditionally required
<b>Definition</b>	Method of administration of antibiotic therapy
<b>Choices</b>	Method of administration from drop down list 1. Oral 2. Injection 3. Topical
<b>Rationale</b>	Required for detailed analysis of antibiotic prescriptions

<b>Data item</b>	<b>Date Started</b>
<b>Response</b>	Alphanumeric Date frame
<b>Classification</b>	Required
<b>Definition</b>	Date operation(s) performed
<b>Choices</b>	Calendar
<b>Rationale</b>	Required to test whether antibiotics prescribed $\geq 48$ hours after admission are an indicator of HAI

<b>Data item</b>	<b>Reason for prescribing this antibiotic</b>
<b>Response</b>	Radio Button Single response
<b>Classification</b>	Conditionally required
<b>Definition</b>	Reason for prescribing antibiotic
<b>Choices</b>	Therapeutic Prophylactic Other
<b>Rationale</b>	Required to determine why antibiotic prescribed

**N.B.** For the purposes of the survey, the term ‘antibiotic’ refers to antibiotic, antifungal and antiviral therapy.

## 8.8 *Invasive devices*

<b>Data item</b>	<b>Does patient have an invasive device in situ</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether an invasive device is in situ
<b>Choices</b>	Yes No
<b>Rationale</b>	To assess the prevalence of external risk factors
<b>Source Hierarchy</b>	Medical/nursing notes→ view patient→ask staff→drug kardex→ IV fluid chart

<b>Data item</b>	<b>Urinary catheter in situ</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether urinary catheter in situ
<b>Choices</b>	Yes No
<b>Rationale</b>	To assess the prevalence of external risk factors

<b>Data item</b>	<b>Peripheral vascular catheter in situ</b>
<b>Response</b>	Radio Button
<b>Classification</b>	Required
<b>Definition</b>	Whether peripheral vascular catheter in situ
<b>Choices</b>	Yes No
<b>Rationale</b>	To assess the prevalence of external risk factors

<b>Data item</b>	<b>Number peripheral vascular catheter in situ</b>
<b>Response</b>	One digit number
<b>Classification</b>	Conditionally required
<b>Definition</b>	Number of peripheral vascular catheters in situ
<b>Choices</b>	Number selected from a drop down list
<b>Rationale</b>	Required to quantify risk of HAI

**Data item**                    **Central vascular catheter in situ**  
**Response**                    Radio Button  
**Classification**                Required  
**Definition**                    Whether peripheral vascular catheter in situ  
**Choices**                      Yes  
                                      No  
**Rationale**                    To assess the prevalence of external risk factors

**Data item**                    **Number central vascular catheter in situ**  
**Response**                    One digit number  
**Classification**                Conditionally required  
**Definition**                    Number of peripheral vascular catheters in situ  
**Choices**                      Number selected from drop down list  
**Rationale**                    Required to quantify risk of HAI

**Data item**                    **Invasive mechanical ventilation in situ**  
**Response**                    Radio Button  
**Classification**                Required  
**Definition**                    Whether patient is being invasively mechanically ventilated  
**Choices**                      Yes  
                                      No  
**Rationale**                    To assess external risk factor for HAI

**Data item**                    **Other invasive device in situ**  
**Response**                    Text  
**Classification**                Required  
**Definition**                    Devices inserted under non-surgical technique  
**Choices**                      User enters text  
**Rationale**                    To assess external risk factor for HAI