Hand Hygiene Compliance Data Review and Validation Process

Version Number: 0.04

Date: September 2019

Contact: handhygiene@safetyandquality.gov.au

1. Version Control

Version	Date	Author	Change Description
0.02	24.08.2016	Kate Ryan	Review, revision and reformat of original baseline document.
0.03	13.09.2016	Sally Havers Andrew Stewardson Kate Ryan	Minor modifications

Major changes should increment the version number by 1.0, minor changes should increment the version number by 0.01

2. Purpose

The purpose of the NHHI data review and validation process is to ensure that all hand hygiene compliance (HHC) data is submitted is reliable, valid and representative.

3. Background

To appropriately measure hand hygiene compliance, the 5 Moments approach allows a comparison of hand hygiene performance across a broad range of health care settings and within a facility across both high versus lower risk clinical environments. For comparison of hand hygiene performance to be valid and meaningful, compliance data submitted as part of the NHHI needs to be collected and submitted in accordance with the Guidelines for Data Submission.

4. Procedure

4.1 Person responsible

The person responsible for this process varies depending on sector (private/public) and jurisdiction. Please contact handhygiene@safetyandquality.gov.au to clarify.

4.2 Timeframe

A review of HHC data should be undertaken by each jurisdictional coordinator and where appropriate, national coordinators at the end of each national data period, before the finalisation of data submission and prior to the commencement of reporting. Currently, the dates that the three national audit data periods end are 31 March, 30 June and 31 October.

4.3 Review process

Three areas of review are required:

1. **Participation review**: Review participation of health organisations in the NHHI by jurisdiction. Where organisations that are expected to participate in national audits have not submitted data, contact the organisation to investigate. Compare and report number of facilities who were expected to submit, the number of facilities who did not and reasons for not submitting.

2. **Required moments review**: Review whether participating organisations submitted the recommended number of moments. Use *Required Moments Report* on HHCApp Reports page. Compare and report number of moments required to be collected per facility and the number of moments submitted, if

facility has submitted less than 90% of required number of moments, notify facility.

3. **Submitted data review**: Assess the accuracy of organisational and user metadata and plausibility of HHC data submitted using standardised review & follow up procedure. The process for this review is outlined below.

5. Submitted data review

Each organisation should be reviewed each audit period in the following standardised manner. The aim is to ensure organisational and user metadata is correct (ie. peer groups, bed numbers, department types, email addresses etc.) and to check the plausibility of hand hygiene audit data.

5.1. Check the currency of organisational metadata

Open the Audits Page

In the search fields select:

- Audit type: National
- Audit Period: Select the audit just closed that you are reviewing
- Audit Status: All

Press **Search**.

Once the search is completed, click on the heading of **Organisation** in the search results to sort the list alphabetically (see below).

For each organisation, right-click on the organisation name and select 'open in new tab'. Follow the procedure below to check the organisation details, user details and department details for each organisation. When you have done this for one organisation, close the tab then do the same for the next organisation in the audit period.

Three areas of review are required to check the currency of organisational metadata:

1. Organisation details

In this new tab will be the 'Organisation details' page, where you will need to check the following:

- Is the address entered?
- Is the peer group correct?
- Are the bed numbers correct?

IF NO: Update fields as required. Note that AIHW Peer Group allocations should be used. Contact handhygiene@safetyandquality.gov.au if support required.

2. User details

Open the 'users' tab for that organisation:
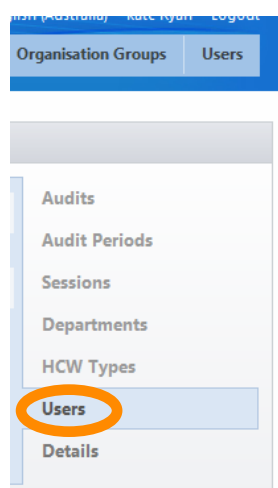
- Are there any generic logins e.g. no specific name for the login?
- Are there any users listed multiple times?
- Does the Organisation Administrator have a separate auditor login?

IF YES: Contact users identified and organise a transition to one personalised login

3. Department details

Open the departments tab:

- Are there any departments with the 'type' listed as "other"?
- Where possible to review does the department name match the 'type' listed eg. A department with name 'Recovery' should be listed as 'type' 'perioperative' rather than 'surgical'.

- Are there any departments with a name that includes "do not use" or "ZZ" that have NOT been marked as 'inactive'?

IF YES: Contact facility Organisation Administrator to assist you with any required updates. Jurisdictional coordinators are required to update HHCApp.

5.2 Check the plausibility of hand hygiene compliance data

This review is designed to detect outlier and implausible results. It is not appropriate to specify absolute values that indicate need for review – the process relies on identification of unusual or unexpected results. Flagged results are not necessarily incorrect, but warrant contact with the organisational lead in order to ensure that the NHHI processes are being followed and identify potential explanations.

- Right click on the Home button and 'open as new tab'
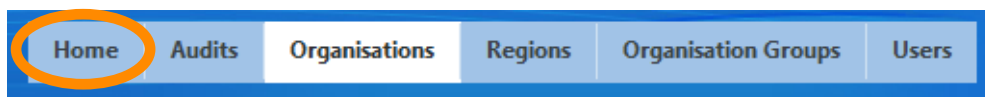
- Right click and 'open as new tab' the following reports onto three separate tabs:
    1. Compliance rate by Department
    2. Combined Compliance rate by Moment and HCW Type
    3. Auditor and Sessions

- In all three tabs fill in the search fields with:
    - National Audit Period: The audit just closed that you are reviewing
    - Name of Organisation: in alphabetical order to match the audit page
- Review each report on each tab for the one organisation currently open and under review:

Three areas of review are required to check the plausibility of hand hygiene compliance data:

1. *Compliance rate by Department report*
    Are there any departments that have significantly higher HHC than other departments?

2. *Combined Compliance rate by Moment and HCW Type report*
    Does the Moments graph follow the 'normal pattern' (higher M3 & M4)?
    Are **all** the moments included in auditing?
    Are there any HCW groups with very high HHC?

3. *Auditor and Sessions report*
    Are there any auditors with HHC significantly higher or lower than the majority of auditors?
    Are there any auditors with HHC 95% and above?

Note: For those auditors outside of the 'normal range of HHC' does where they collect their data explain their results eg. high HHC and all data collected in NICU, low HHC and all data collected in ED, or high HHC but all other auditors that audited the same wards had similar results.

Is all the data collected by one auditor, if yes is this correct for that organisation? Do any auditors collect >600 moments individually?

IF YES to any of the points above: contact the organisation to verify.

If all data check above are satisfied, go back to the organisation tab, open the audits tab for the organisation and mark the audit as 'complete'

If there are differences between the HHC data from the state or national average, review the pattern, rate and confidence interval for each category, remembering that the wider the confidence interval the less reliable the result is.

If there any points in the above data check that need clarifying, changing or removing please contact the Organisation Administrator for the site and give a short deadline for reply, to allow time for your jurisdiction data to be completed in time for the National data reports.

If contacting regarding any part of the Auditor and Sessions report, please ensure that all auditors for the organisation have met the Annual Auditor Validation requirements before contacting the Organisation Administrator.

If the hospital is again identified in the subsequent audit period, contact handhygiene@safetyandquality.gov.au prior to further communication with the facility.

6. Reporting Validation Results

Outcome of validation and review process to be included in Jurisdictional reports submitted each audit period to handhygiene@safetyandquality.gov.au.

Appendix 1.

```
┌─────────────────────┐
│ Run Jurisdictional  │
│ report              │
└──────────┬──────────┘
           │
           ▼
┌─────────────────────┐  Yes  ┌─────────────────────┐      ┌─────────────────────┐
│ Is there any        │─────▶ │ Follow up with      │────▶ │ Report number of    │
│ hospitals/health    │       │ each non            │      │ non-compliant       │
│ services required   │       │ compliant facility  │      │ facilities & reason │
│ to submit that      │       └─────────────────────┘      │ for non compliance  │
│ have not?           │                                    │ to NHHI             │
└──────────┬──────────┘                                    └─────────────────────┘
     No    │
           ▼
┌─────────────────────┐  Yes  ┌─────────────────────┐      ┌─────────────────────┐
│ Are there any       │─────▶ │ Follow up with      │────▶ │ Report number of    │
│ Organisations who   │       │ each non            │      │ non compliant       │
│ did not submit ≥90% │       │ compliant facility  │      │ facilities & reason │
│ of the required     │       └─────────────────────┘      │ for non compliance  │
│ number of moments   │                                    │ to NHHI             │
│ as per NHHI manual? │                                    └─────────────────────┘
└──────────┬──────────┘
     No    │
           ▼
┌─────────────────────┐  Yes  ┌─────────────────────┐
│ Complete plausibility│────▶ │ Follow up           │
│ check. Are there any │      │ email/phone call    │
│ organisations with   │      │ required for each   │
│ atypical results?    │      │ facility identified │
└──────────┬──────────┘      │ to have submitted   │
     No    │                 │ potentially         │
           │                 │ inaccurate data     │
           │                 └──────────┬──────────┘
           │                            ▼
           │                 ┌─────────────────────┐
           ▼                 │ Report number of    │
┌─────────────────────┐ ◀────│ facilities of       │
│ Validation process  │      │ concern & reason    │
│ complete            │      │ for concern to NHHI │
└─────────────────────┘      └─────────────────────┘
```