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2023 PACIFIC INFECTION PREVENTION AND CONTROL NETWORK MEETING
24 – 26 May 2023, Nadi, Fiji

Agenda Item N° 4.1

BUILDING A STANDARDISED HAND HYGIENE PROGRAM

(Paper presented by Ms Kate Ryan, Program Officer, Austin Health, Australia)

Summary

- 1 The Hand Hygiene Australia (HHA) program is a multimodal culture change program that has resulted in significant improvements in hand hygiene (HH) compliance within the Australian Healthcare system, along with reductions in healthcare-associated *Staphylococcus aureus* bacteraemias (HA-SAB).
- 2 Implementation of the HHA program in the Pacific Community will require key decisions to be made to ensure standardisation and comparability of program and results between member countries of the Pacific Community. There must also be acknowledgement that the HH program is not just about auditing but encompasses culture change to improve patient safety via improved HH behaviour.

Background

- 4 Hand Hygiene Australia (HHA) was established after studies demonstrated that multimodal culture-change programs and increased use of alcohol-based hand rub reduced rates of health care-associated infections (1-3). The aim was to implement a standardised hand hygiene (HH) culture-change program to improve HH compliance among Australian health care workers (HCWs); and to establish a validated system of HH compliance auditing to allow local, national, and international benchmarking.
- 5 The HHA program is based on the World Health Organization “5 Moments for Hand Hygiene” program (4). Standardised program documents were created for hand hygiene education and auditing of hand hygiene compliance. A train-the-trainer model was established for auditor training, with standardised training materials used for the mandatory training requirements (5).

6. Ward selection and number of hand hygiene moments were detailed, with guidelines mandating the inclusion of specified high-risk areas (e.g., intensive care units, transplantation units, haematology–oncology units, and emergency departments) and rotation of all other areas were implemented.

7. Data submitted via the HHA database was assessed by HHA for consistency and errors using a standardised review and validation process. In addition, the requirement for all auditors to complete mandatory validation requirements was established. This consisted of annual online training and regular auditing with a 100 moment minimum within a year. From 2011 there was public reporting of institution level hand hygiene compliance data.

Progress/Achievements

8. After the first two years of the HHA program, there were 521 hospitals participating and HH Compliance was 68%. For new programs, HH Compliance improved from a baseline of 44% to 68% ($P=0.001$). Prior to the program SAB rate was stable, and the rate declined after implementation ($P=0.008$) (6). After eight years of the HHA program, we could confidently say for every 10% increase in HH compliance, the incidence of HA-SAB decreased by 15% (7).

9. The Pacific Community have made the first step in committing to hand hygiene improvement and patient safety by signing up to the HHA program. Auditor training commenced in 2022 with 33 auditors trained across seven countries.

Challenges

10. Congratulations to the Pacific Community in elevating infection control and patient safety, to the multi-nation agenda. Committing to addressing patient safety via improvements in hand hygiene compliance is the first step.

11. The challenge is that there will need to be key decisions made on the governance and direction of the hand hygiene program. Reviews of the HHA program show that the central coordinating and supporting role of HHA was important, including: assistance for local ownership; ensuring national standardisation and messaging; validation, data integrity, and auditing efficiency via provision of tools such as the central database, HCCApp mobile, mobile data entry; and educational materials.

12. HHA based the culture-change program on the WHO multimodal improvement strategy (8). A number of key decisions will need to be made by the Pacific Community about future directions of your hand hygiene program. These include, but are not limited to:

- System Change - Alcohol based hand run at the point of care
- Education and training – inclusive of auditors, healthcare staff and the community
- Monitoring and performance feedback e.g., HH Compliance data collection, reporting and timely feedback to staff
- Reminders in the workplace e.g., promotional materials
- Institutional safety climate e.g., Embedding hand hygiene in all activities

Future Directions - Recommendations

13. It is a recommendation that the Pacific Community discuss the following items and make decisions as a key priority for the progression of the Pacific-wide Hand Hygiene Program:

Hand Hygiene Program governance and coordination

- Governance structure for program participation, data submission and action planning
 - Hospital lead straight to Pacific Community **vs** Hospitals to Country leads to Pacific Community
 - Accountability to collect and submit data to the Pacific Community

Standardisation of Hand Hygiene Program

- Audits
 - Audit frequency – recommend 2 x audit periods per year
 - Number of moments to be collected and guidelines on where data is collected from
 - Initial Baseline audit vs ongoing
- Structure of local hand hygiene training within each country/hospital
 - HHA trains leads
 - Leads train all other auditors **vs** leads train a trainer at each hospital
 - Requirements for ongoing auditor validation
 - Hand Hygiene Team requirements
- General hand hygiene education
 - HHA learning system vs local systems
 - Does a general module need to be created for Pacific Community members?
- Reporting HH Compliance results

Hand Hygiene Program is not just about auditing

- A hand hygiene program is a culture change program and requires commitment to ensure:
 - Access to hand hygiene products – ABHR and soap/water
 - Hand hygiene education – auditors and general staff
 - Review of audit data and establishment of required actions to be implemented **prior to** further auditing
 - Ongoing promotion of hand hygiene
 - Embedding hand hygiene within all healthcare activities

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