

# QAPI 20 - Data Rather Than Germs on Your Fingertips: Leveraging Business Intelligence to Improve and Sustain Hand Hygiene Compliance

**Background:** Hand hygiene (HH) is the simplest, most effective act to prevent the spread of pathogens in health care. To achieve 100% HH compliance, access to current compliance rates and details of missed opportunities for timely interventions are integral. Oftentimes, data is shared after the data observation period, leaving little opportunity to address non-compliance or improve compliance. In response, we created an interactive dashboard utilizing business intelligence (BI) software to provide real-time access and analysis of HH data to improve and sustain compliance.

**Methods:** Dashboards were created using commercially available BI software in August 2018. Key performance indicators were used in the dashboard designs to provide HH data at-a-glance that included current monthly compliance, month-over-month comparison, and total number of missed HH opportunities. Weekly compliance was also trended to show week-by-week performance, and red color schemes emphasized improvement areas. Details about specific missed opportunities (e.g., failure to perform HH prior to donning personal protective equipment) was shared. Filters enabled customizable views of a specific unit and role. A subscription option allowed users to receive automatically generated reports on a set frequency.

**Results:** A month after the dashboards became available, 19 units improved compliance to 95% or greater, with 12 of those units having a 5% or more improvement. From November 2018 to February 2020, institutional HH compliance was sustained at or above 95%. The HH dashboards have been accessed over 25,000 times and has combined 80 plus custom views and subscribers.

**Conclusions:** BI software is a useful tool to analyze and summarize HH compliance data in real-time, improving access and response. HH compliance is sustained at or above the institutional target of 95%, and the HH dashboards will continue to be used to share data and improve and sustain compliance with the goal of 100% HH compliance.

## Learning Objectives:

- Describe the importance of hand hygiene in healthcare.
- Describe how technology such as business intelligence software can be used in the field of infection prevention.
- Describe how to improve hand hygiene compliance.

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