Rationale for 200 Opportunities per Hand Hygiene Audit for WRHA Facilities

Direct observation of healthcare workers during patient/resident/client care activity by trained and validated observers is recognized as the gold standard for hand hygiene monitoring. Observation makes it possible to quantify the specific need for hand hygiene and assess the quality of practice. Direct observation is a demanding and resource-intensive activity requiring training, skill, and experience and has potential biases and confounding factors that can be minimized only by applying a rigorous method. As it is rarely practical to observe hand hygiene compliance at all times in all areas of a healthcare facility, a sample is taken to represent the compliance at a particular unit, department, or hospital over a time period. The greater the sample size, the better the confidence in the result to allow meaningful comparison between units and between time points.

It is important for WRHA to have reliable results. 200 opportunities is the minimum requirement in healthcare delivery areas/sites to have reliable comparable results over the long term. **200 opportunities are required to meet statistical significance and is the number recommended by the World Health Organization as well as other international, federal and provincial organizations.** The WRHA has used the guidance of these organizations to determine the number of opportunities required per audit. Note that collecting 200 opportunities will require a greater number of either indications (Moments) or observations.

Community and other clinic settings have different client populations as well as different levels of care and interactions. The number of opportunities recommended in these areas are individually determined with the regional Infection Control Professional.

The aim of presenting hand hygiene compliance results is to give an accurate overall indication of the compliance among staff and allow facilities to compare their own data over time. Audit results do not present the same scientific data as surveillance data; however, they aim to provide valuable and contextual information that can help target hand hygiene activities to improve compliance where required in each area. To ensure audit results are generalizable as an appropriate representative sample to the whole area/unit, multiple healthcare workers (HCW) and HCW categories must be audited throughout the audit process.

Published hand hygiene auditing practice recommendations:

1. **World Health Organization (WHO)**
   
   The WHO Hand Hygiene Technical Reference Manual recommends 200 opportunities per unit per observation period stating:
   
   “There is no clear evidence on the ideal sample size needed to ensure representativeness, but sample size estimates indicate that **200 opportunities per observation period** [e.g., quarter] and **per unit of observation** (either ward, department, or professional category etc) are needed to compare results reliably.

   To sum up, the following principles must always be adhered to:
Define the scope of the observation

- Gather data on 200 opportunities per observation per unit (either ward, department or professional category, etc.) [program or geographic area] per observation period [e.g., quarter]
- Observe practices by health-care professionals in direct contact with patients/residents/clients
- Document the data by professional category and by setting, gathered during 20 minute sessions (may be up to 10 minutes longer or shorter)
- Do not observe more than three health-care workers simultaneously”

2. Dr. Didier Pittet
Dr. Didier Pittet1, Professor of Medicine, Director of the Infection Control Programme at the University of Geneva Hospitals and Faculty of Medicine, Switzerland, Lead of the World Health Organization’s World Alliance for Patient Safety First Global Patient Safety Challenge “Clean Care is Safer Care”, and the internationally recognized leader in hand hygiene practices, has published literature describing the statistics related to attempting to show either a 10 or 20% change over time, and 200 opportunities lies close to a 20% change. Without 200 opportunities, there would not be the statistical power to determine if the changes seen are significant and/or reliable over time.
References:

