Canadian Four Moments Versus the WHO Five Moments of Hand Hygiene - What is the Actual Difference?
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Background/Objective:
The WHO hand hygiene program recommends basing healthcare worker hand hygiene education on The 5 Moments for Hand Hygiene.

In contrast, Ontario and certain other provinces and regions of Canada use 4 Moments, of which Moment One has added before patient environment contact.

We compared patient interactions and hand hygiene opportunity assessments in two hospitals, one using each program, to assess how the actual number of hand hygiene opportunities differed.

Methods:
Data from the HOW2 Benchmark Study1, conducted at the Greenville Health System, Greenville, South Carolina (Hospital #1) were compared to data collected in a hand hygiene opportunity study conducted at the Mount Sinai Hospital, Toronto (Hospital #2).

Results:
During 694 hours of observation, 11,245 hand hygiene opportunities were identified between the two sites. Observations at Hospital #1 were healthcare worker-based, and were patient-based at Hospital #2.

On medical/surgical units and in the ICU, the distribution of hand hygiene opportunities by moments for The Canadian 4 Moments was:
- M1 42%, M2 9.2%, M3 7.8%, M4 39.4%, M1+M2 0.6%, M3+M4 0.9%

The distribution of hand hygiene opportunities by moments for the WHO 5 Moments was:
- M1 23%, M2 2.6%, M3 1.1%, M4 3.6% M5 35%, M1+M2 6.4%, M3+M4 1.3%, M3+M5 0.3% M3+M4+M5 4.2% M4+M5 20.6%, Other 2.1%

Calibration of the two datasets yielded 5,713 hand hygiene opportunities in the 4 Moment methodology compared to 4,374 in the 5 Moment methodology -- an increase of 30.6%. See Figure 1

Comparison of Total Hand Hygiene Opportunities using the WHO 5 Moments Method vs. Canadian 4 Moments

Conclusion:
In acute care Hospital #2, recommending adherence to “The Canadian 4 Moments” was associated with 30.6% more hand hygiene opportunities than adherence to “The WHO My 5 Moments” program, as a result of the requirement for hand hygiene prior to contact with the patient environment. This difference between the two programs may not be of the same magnitude in different care settings, or in settings with different patterns of patient care.

Thus, when calculating compliance using automated or electronic monitoring systems that require a validated pre-determined denominator2 for acute care settings it is necessary to adjust The WHO My 5 Moments pre-determined denominator by a factor of plus 30.6%.

References: