

Measuring the Consumption of Products in Association with the Implementation of a Multimodal Hand Hygiene Improvement Strategy

Purpose:

This tool provides a simple template to measure the consumption of products (e.g. soap and alcohol-based hand rubs) associated with implementing a hand hygiene improvement strategy.

Measuring consumption of these products is an indirect method of monitoring hand hygiene performance. This indicator can help to assess the uptake of the intervention as a whole and provide an overall indication of success. It also provides the opportunity to control stock levels over the short- and medium-term and to help estimate likely increases in requirement, particularly relating to alcohol-based hand rub.

Method:

A simple way to collect data is through PHSA supply chain, by regularly reviewing order forms for the selected product (e.g. alcohol-based hand rub solutions). Measurement of consumption should be repeated at the end of each month; if this is not feasible, it should be undertaken at time intervals that are better suited to the purchase/distribution cycle of the unit or site. The grid for information collection included in this document offers the possibility to record data by month up to a period of 6 months. A new form should be filled in for every 6-month period. If monthly data is not available, cumulative data corresponding to longer periods (e.g. 3 or 6 months) should be entered. This measurement will contribute to the development of a plan for long-term procurement sustainability of products and monitoring usage.

Calculations of consumption made on the basis of purchased or distributed products may be biased by the amount of product still in stock (i.e. not all products may have been used). Please ensure that the amount in stock is subtracted to calculate the real product consumption. It is important to indicate whether the amount reported correspond to the purchased or to the used product.

Any variation in workforce or expansion of clinical care spaces should be recorded as this will impact on the overall consumption measurement.

Feedback:

- The attached protocol forms are for measurement of consumption over a 6-month period.
- The forms should be filled in monthly, preferably at the end of each month.
- At the end of the 6-month period, product consumption can be tabulated for an entire site or the respective unit or program.
- An increasing consumption trend indicates the success of hand hygiene intervention.
- Static or declining trends post-implementation need to be examined closely. They may be linked to lack of product availability, distribution delays or interruptions, or other reasons.

Protocol to Measure the Consumption of Products for Hand Hygiene Intervention – Alcohol-Based Handrub			
Site Name:		Name(s) of Implementation Lead(s):	
Does the Amount Measured Relate to:	<input type="checkbox"/> Whole Site <input type="checkbox"/> A Department <input type="checkbox"/> A Selected Unit/Program		
Type of Care Setting (Select all that apply):	<input type="checkbox"/> Inpatient <input type="checkbox"/> Residential <input type="checkbox"/> Outpatient <input type="checkbox"/> Community <input type="checkbox"/> Homecare/Outreach		
Please Indicate Which Unit/Program or Site:			
If the measured amount relates to an entire site or department, please list all included programs:			
6-Month Measurement Period (Please include specific dates):			
Product:	<input type="checkbox"/> Microsan Dispenser Refill 1 Litre (ePro #: 00077133) <input type="checkbox"/> Microsan 400 ml Pump (ePro # 00077132) <input type="checkbox"/> Microsan 50 ml Personal Sized (ePro #00077131)		
Information Recorded is Related to:	<input type="checkbox"/> Purchased/Distributed Product (adjusted for stock on hand) <input type="checkbox"/> Used Product		
	Amount Purchased/Used:		Service Activity:
	Total Units Used (Bottles):	Total Volume (Litres):	<input type="checkbox"/> Number of patient-days (inpatient/residential) <input type="checkbox"/> Number of admissions <input type="checkbox"/> Number of client visits/encounters <input type="checkbox"/> Average Occupied Beds <input type="checkbox"/> Other (specify): _____
Month 1 Date:			Client Encounters:
Total site, department or unit/program			
Month 2 Date:			
Total site, department or unit/program			
Month 3 Date:			
Total site, department or unit/program			
Month 4 Date:			
Total site, department or unit/program			
Month 5 Date:			
Total site, department or unit/program			
Month 6 Date:			
Total site, department or unit/program			
Totals:			
Calculation:	<ul style="list-style-type: none"> • Inpatient/Residential: Litres Used ÷ patient-days x 1,000 • Community/Clinic: Litres Used ÷ client visits x 1, 000 		

Protocol to Measure the Consumption of Products for Hand Hygiene Intervention – Hand Soap			
Site Name:		Name(s) of Implementation Lead(s):	
Does the Amount Measured Relate to:	<input type="checkbox"/> Whole Site <input type="checkbox"/> A Department <input type="checkbox"/> A Selected Unit/Program		
Type of Care Setting (Select all that apply):	<input type="checkbox"/> Inpatient <input type="checkbox"/> Residential <input type="checkbox"/> Outpatient <input type="checkbox"/> Community <input type="checkbox"/> Homecare/Outreach		
Please Indicate Which Unit/Program or Site:			
If the measured amount relates to an entire site or department, please list all included programs:			
6-Month Measurement Period (Please include specific dates):			
Product:	<input type="checkbox"/> Hygenipak Pure Plain Soap Refill 1L (ePro #: 00077133)		
Information Recorded is Related to:	<input type="checkbox"/> Purchased/Distributed Product (adjusted for stock on hand) <input type="checkbox"/> Used Product		
	Amount Purchased/Used:		Service Activity:
	Total Units Used (Bottles):	Total Volume (Litres):	<input type="checkbox"/> Number of patient-days (inpatient/residential) <input type="checkbox"/> Number of admissions <input type="checkbox"/> Number of client visits/encounters <input type="checkbox"/> Average Occupied Beds <input type="checkbox"/> Other (specify): _____
Month 1 Date:			Client Encounters:
Total site, department or unit/program			
Month 2 Date:			
Total site, department or unit/program			
Month 3 Date:			
Total site, department or unit/program			
Month 4 Date:			
Total site, department or unit/program			
Month 5 Date:			
Total site, department or unit/program			
Month 6 Date:			
Total site, department or unit/program			
Totals:			
Calculation:	<ul style="list-style-type: none"> • Inpatient/Residential: Litres Used ÷ patient-days x 1,000 • Community/Clinic: Litres Used ÷ client visits x 1, 000 		

*SAMPLE COMPLETED TOOL			
Protocol to Measure the Consumption of Products for Hand Hygiene Intervention – Alcohol-Based Handrub			
Site Name: Vancouver Community Mental Health – Downtown Team		Name(s) of Implementation Lead(s): J. Smith (Manager), L Chan (Clinical Educator)	
Does the Amount Measured Relate to:	<input type="checkbox"/> Whole Site <input type="checkbox"/> A Department <input checked="" type="checkbox"/> A Selected Unit/Program		
Type of Care Setting (Select all that apply):	<input type="checkbox"/> Inpatient <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Outpatient <input type="checkbox"/> Community <input checked="" type="checkbox"/> Homecare/Outreach		
Please Indicate Which Unit/Program or Site:	Adult community mental health team providing outpatient and outreach client visits.		
If the measured amount relates to an entire site or department, please list all included programs:	Measurement related to this specific team and related cost centre.		
6-Month Measurement Period (Please include specific dates):	January 1 – June 30, 2026		
Product:	<input checked="" type="checkbox"/> Microsan Dispenser Refill 1 Litre (ePro #: 00077133) <input type="checkbox"/> Microsan 400 ml Pump (ePro # 00077132) <input checked="" type="checkbox"/> Microsan 50 ml Personal Sized (ePro #00077131)		
Information Recorded is Related to:	<input checked="" type="checkbox"/> Purchased/Distributed Product (adjusted for stock on-hand) <input type="checkbox"/> Used Product		
	Amount Purchased/Used:		Service Activity:
	Total Units Used (Bottles):	Total Volume (Litres):	<input type="checkbox"/> Number of patient-days (inpatient/residential) <input type="checkbox"/> Number of admissions <input checked="" type="checkbox"/> Number of client visits/encounters <input type="checkbox"/> Average Occupied Beds <input type="checkbox"/> Other (specify): _____
Month 1 Date: January 5, 2026			Client Encounters:
Total site, department or unit/program	45 - 1 L 13 - 50 ml	5.150 L	1050
Month 2 Date: February 2, 2026			
Total site, department or unit/program	42 - 1 L 15 - 50 ml	4.950 L	980
Month 3 Date: March 2, 2026			
Total site, department or unit/program	50 - 1L 12 - 50 ml	5.600 L	1120
Month 4 Date: April 6, 2026			
Total site, department or unit/program	48 - 1L 13 - 50 ml	5.450 L	1090
Month 5 Date: May 4, 2026			
Total site, department or unit/program	52 - 1L 10 - 50 ml	5.700 L	1150
Month 6 Date: June 1, 2026			
Total site, department or unit/program	55 - 1L 15 - 50 ml	6.250 L	1200

Totals:		33.1 L	6590
$33.1 \div 6590 \times 1000 = 5.02$ litres per 1000 client visits			
Calculation:	<ul style="list-style-type: none"> • Inpatient/Residential: Litres Used \div patient-days x 1,000 • Community/Clinic: Litres Used \div client visits x 1, 000 		