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Background

The Nova Scotia Medical Examiner's Office (NSMES) is a government organization which is headquartered in Dartmouth, Nova Scotia. NSMES' mandate is to investigate deaths in Nova Scotia which are violent, unexpected, or unexplained.

Problem Statement

Between 2020 and 2021, 93% of scenes were not attended by NSMES staff. In 80% of these cases, the reason listed was not specified by the investigator. The decision-making process surrounding scene attendance is not well-understood by NSMES at present.

VertiQ is a new data management software in development at NSMES. There is not currently a defined method for entering scene data into the software. Without a consistent way of entering data into the software, it may lead to unnecessary effort on the part of investigators.

Project Goals

Generate a Data Entry User Guide that would reduce unnecessary workload for investigators in inputting scene data in NSMES' new database.

Create a decision support tool to aid the client in deciding whether to attend a death scene or not by assessing the factors that contribute to the decision.

Approach

Gathering context and mapping client processes

↓

Creating problem definition and problem scope

↓

Gathering data to further narrow client needs

↓

Creating tools to address client needs

↓

Implementing tools and making changes based on client feedback

Scene Attendance Decision Support Tool

Name: Case No: Date:

NSMES Scene Attendance Decision Support Tool

Please go through the following check boxes. If you check one of the boxes, you need to attend the scene. If no, please go to the next part.

☐ Death involves an infant.
☐ Death is a suspected homicide or multiple decedents.
☐ Law enforcement request to attend.

Please go through the factors in the table blow. Check yes or no as appropriate to the death being investigated. Add the weight of the factors that were checked yes.

Factors Involved in Decision	Weight (1 to 5)	Yes	No
Death related to fire	4		
Death related to water	4		
Workplace accident	4		
Foreign national death	4		
Death location accessible	3		
Clear weather	3		
Presence of non-prescription drugs	3		
Presence of Alcohol	3		
Age of decedent between 19 years and 70 years	2		
Distance to the scene in a radius of a 150 KM	2		
Poor living conditions of decedent	2		
Death is unexpected at home	2		
Presence of prescription drugs	2		
Total	**/38**		

Are there any other factors not mentioned above that requires you to attend the scene?

After completing the check list above if the number added is 11 or higher then consult with your supervisor about attending or not. If the number added is between 15 and 23 it is recommended to attend the death scene. If the number is 23 or higher it is strongly recommended to attend the scene.

Note:

Total number of weights 11 or higher

→ Consult supervisor about whether it is necessary to attend the scene.

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Total number of weights between 15 and 23

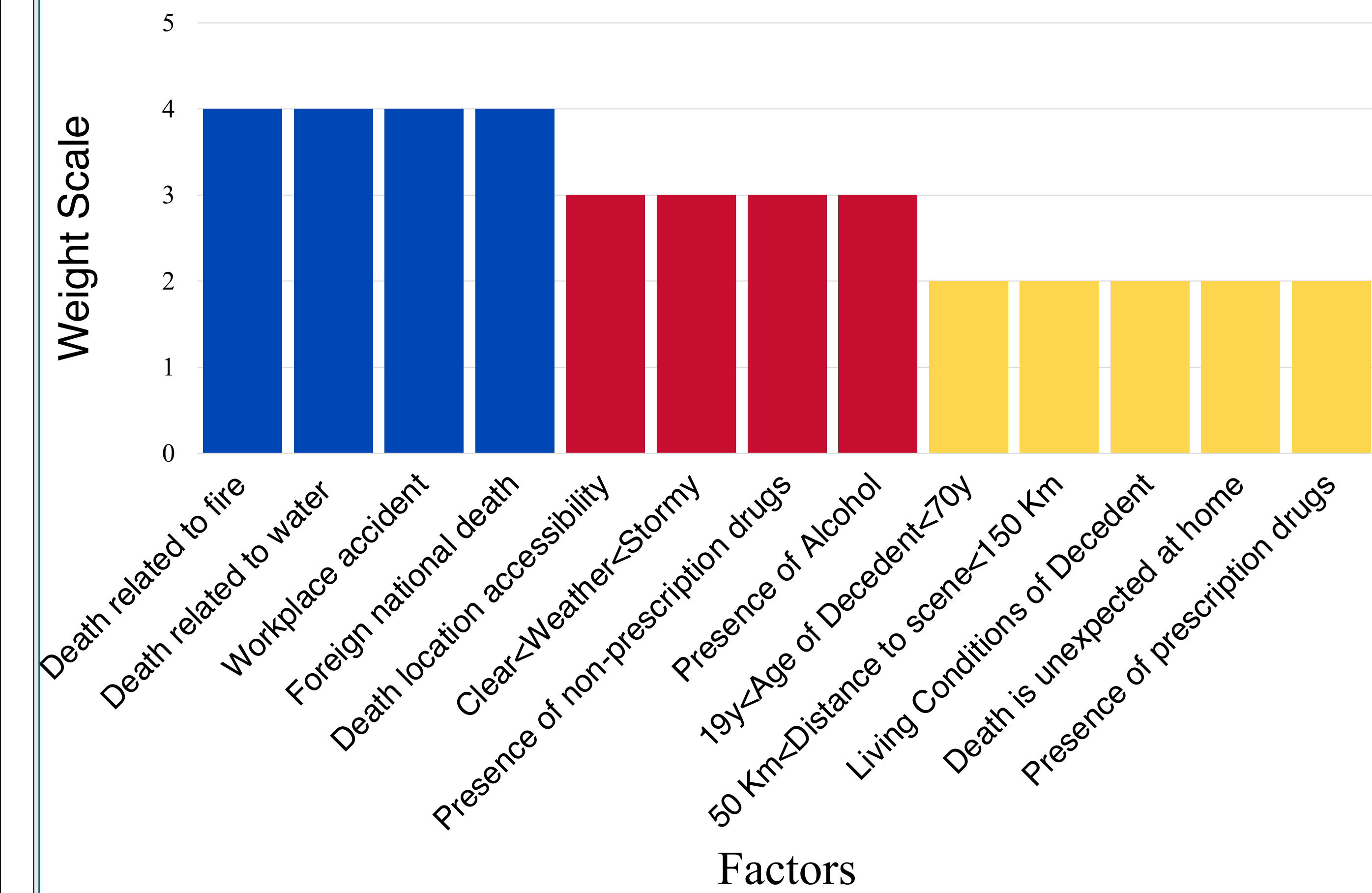→ Recommended to attend the death scene.

↓

Total number of weights 23 or higher
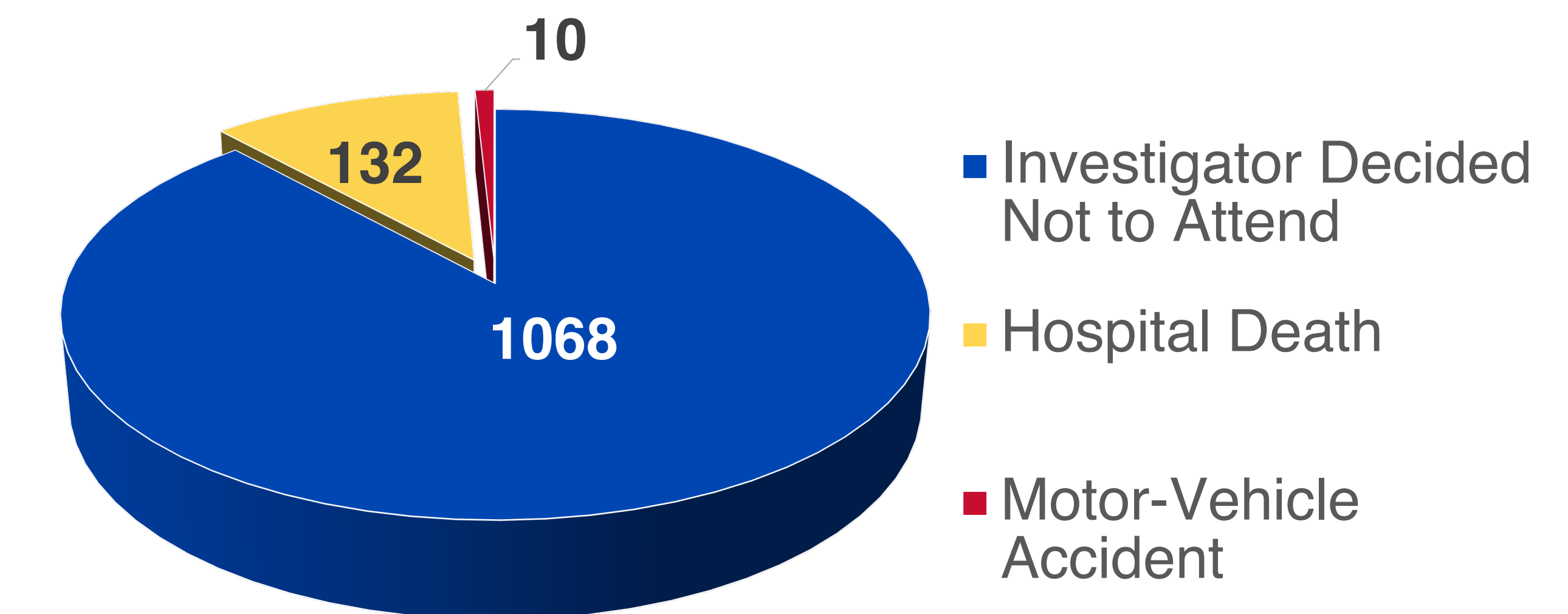
→ Strongly recommended to attend the death scene.

A digital version of the tool has been created using Microsoft Forms.

Sample of Data Collected

FACTORS INVOLVED IN DECISION

TOP THREE REASONS ON WHY SCENE WAS NOT ATTENDED

- Investigator Decided Not to Attend (1068)
- Hospital Death (132)
- Motor-Vehicle Accident (10)

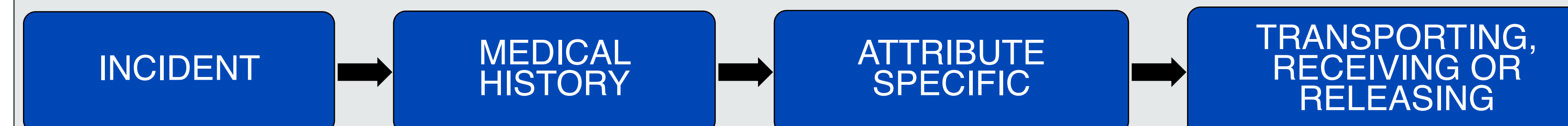## VertiQ Scene Data Entry User Guide

1.0 Initial Data Entry

Visit this section after the first collection of data on the death. Input all necessary information.

NEW CASE

2.0 Successive Data Entry

Visit these sections in order, whenever new scene data is collected and input all relevant information. These sections are all under the "investigation" tab on VertiQ

INCIDENT → MEDICAL HISTORY → ATTRIBUTE SPECIFIC → TRANSPORTING, RECEIVING OR RELEASING

Recommendations

1 Continue to use VertiQ User Guide with simulated cases and implement as a training tool.

2 Use decision support tool and document results, with periodic checks on performance of tool.

3 Examine methods for integrating decision support tool into VertiQ in the future.