

Exercise 9a

Problem Cause Data Analysis – Problem Concentration Diagram

Name: _____ Date: _____

Instructions:

1. Use the data provided to create a Problem Concentration Diagram.

Background Information – Quality in Healthcare

The location where an event occurs may be important information. For instance, in which operating rooms do injuries occur? Which floors see fall accidents? A problem concentration diagram helps you connect events to physical locations, thus perhaps revealing patterns of occurrence.

Example:

A long-term care facility wanted to see whether patient falls occurred randomly throughout the facility's buildings and outdoor area or were concentrated in some areas. The investigation team reviewed all reported falls during the last year. In the majority of these, event reports described the location of the falls.

Based on the data shown in Table 1 below, produce a problem concentration diagram using the template provided for the building layout. The building layout indicates the types of rooms (for example, bathrooms, bedrooms, corridors). Plot the recorded falls on this diagram.

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Steps

1. Use the data provided from the Event Reports in Table 1 below:

Event Reports		
Date	Patient	Event
1/1/2016	Z	Fell in kitchen
1/13/2016	X	Fell in bathroom
1/29/2016	A	Fell in bedroom 2
1/31/2016	D	Fell in bedroom 1
2/4/2016	U	Fell in kitchen
2/5/2016	H	Fell in bedroom 3
2/11/2016	V	Fell in bathroom
2/18/2016	Z	Fell in bedroom 1
2/22/2016	R	Fell in recreation room
2/25/2016	K	Fell in bathroom
2/29/2016	I	Fell in bedroom 1
3/1/2016	O	Fell in corridor
3/3/2016	A	Fell in bathroom
3/4/2016	G	Fell in kitchen
3/9/2016	W	Fell in bathroom
3/11/2016	Q	Fell in recreation room
3/20/2016	N	Fell in bathroom
3/22/2016	F	Fell in bathroom
3/24/2016	K	Fell in corridor
3/24/2016	D	Fell in bathroom
3/26/2016	L	Fell in bathroom
3/28/2016	T	Fell in patio
3/29/2016	B	Fell in kitchen
3/30/2016	X	Fell in corridor

2. Assign a symbol or color to each type of fall occurrence.
3. In this particular exercise the period for data collection was the first quarter of 2016.
4. Use the building layout template provided in Figure 1.
5. Populate the layout using the data from the Event Reports to record locations of fall occurrences.
6. Analyze the diagram to identify patterns of problem fall occurrences.

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<i>Bedroom 1</i>	<i>Bedroom 2</i>	<i>Bathroom</i>	<i>Bedroom 3</i>	<i>Bedroom 4</i>
<i>Corridor</i>				
<i>Kitchen</i>	<i>Nurse Station</i>	<i>Recreation Room</i>		
<i>Patio</i>				

Figure 1 Building Layout

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● = January ▲ = February ■ = March

