

Improving Delirium Screening Among Elderly Hospitalized Patients



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INTRODUCTION

- Delirium is a significant problem for med/surg hospital inpatients.
 - Incidence 10-55%, Prevalence 5-15%.
- Increasing age is a risk factor.
 - 30-40% of hospitalized patients >65 years have delirium episodes.
 - 10-15% exhibiting signs of delirium on admission.
 - Three times more likely to be placed in long-term care.
- Mortality Rates
 - 21-75% during hospitalization (Sadock, Sadock, & Ruiz, 2015).
- Formal education in delirium and screening tools assist nurses in early recognition of delirium (McCrow et al., 2014).
- The Confusion Assessment Method (CAM) is a valid and reliable screening instrument for delirium (Afriye-Boateng, Loftus, & Hamelin, 2015).
 - Sensitivity of 82-100%.
 - Specificity of 77-99% (Shi, Warren, Saposnik, & MacDermid, 2013).
- Found useful in numerous hospital settings (Smulter et al., 2015).
- CAM screening can reduce mortality, LOS, and readmission rates (Todd et al., 2015; Tsang et al., 2015).

PURPOSE

- Currently there is no formal screening for delirium at Blessing Hospital except for the Critical Care unit.
- Overall goals of the project include:
 - providing educational training for registered nurses (RNs) regarding a valid screening instrument (CAM).
 - improving identification of delirium on the medical/surgical floor.
 - initiate utilization of the CAM screening protocol in hospitalized older patients.

PICOT

In staff nurses on a medical-surgical hospital unit (P), does implementation of a nurse-led delirium screening protocol using the CAM screening tool (I) compared to no protocol (C) improve identification of delirium and intervention in hospitalized elderly patients by nursing staff (O) at 1-month and 2-month follow-up (T)?

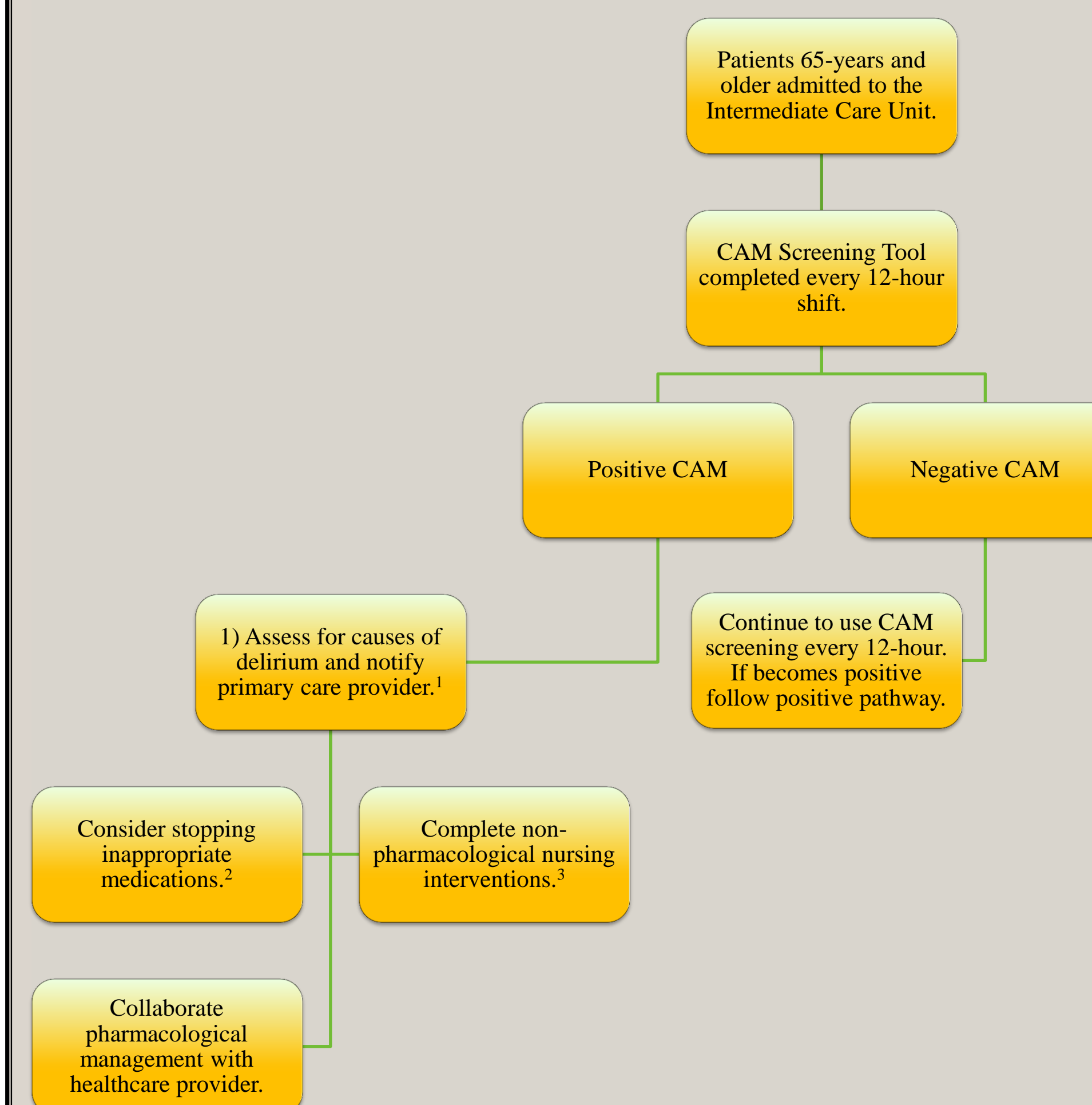
OBJECTIVES

- 75% of registered nurses on the pilot unit complete education on the CAM screening tool and protocol.
- 15% of eligible patients are screened with the CAM screening tool at 1-month and 2-month follow-up.
- 15% of the CAM screening protocol outcomes are followed at 1-month and 2-month follow-up.

METHODS

- Design**
- Longitudinal design with purposive convenience sampling after education, and at 1-month and 2-month post-project implementation.
- Setting & Population**
- Setting was a 40-bed intermediate care unit at a regional health center in Adams County, Illinois.
 - Purposive convenience sampling was completed on two sets of participants (RNs & elderly hospitalized patients 65-years and older).
 - RNs were provided a computer-based learning module on delirium, CAM Screening, and CAM protocol.
 - Definitions; features; etiology; risk factors; nurse managed prevention interventions, instruction on the CAM Screening tool and protocol.
 - For positive CAM results, the CAM screening algorithm provided RNs nurse-managed interventions.
- Data Collection**
- RN data collection occurred as part of the quiz of the CBL.
 - Patient data collection occurred at two different intervals: post-implementation at 1-month (March 1, 2017) and 2-month (April 1, 2017).

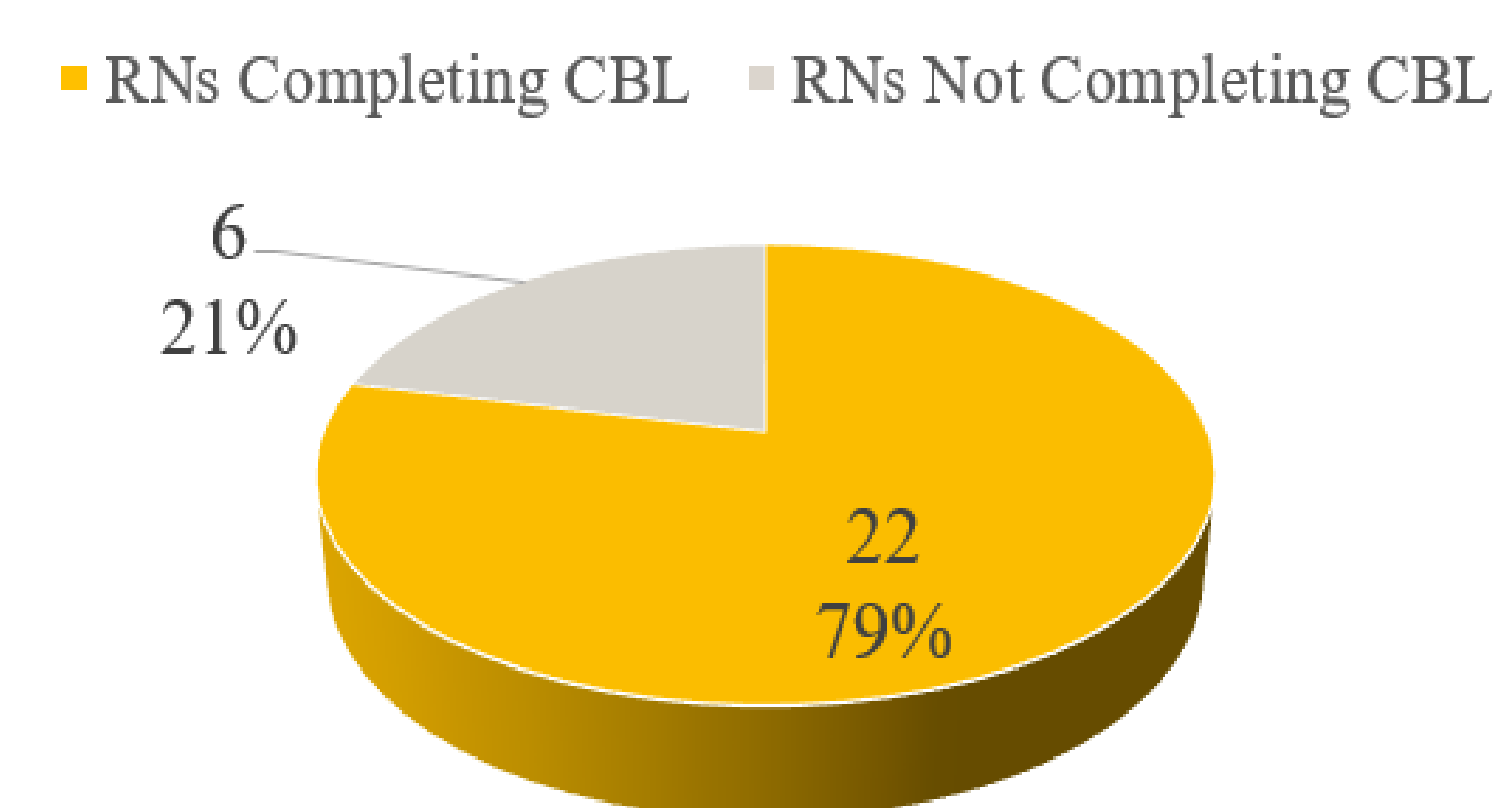
CAM Screening Protocol



RESULTS

Characteristics of RNs (n = 22)				Characteristics of Elderly Hospitalized Individuals (n = 167)			
Characteristics	n	Percent	Characteristics	n	Percent		
Gender			Gender				
Male	0	0	Male	94	56.3		
Female	23	100	Female	73	43.7		
Age Range			Race				
20-30	11	47.8	Black or African-American	7	4.2		
31-40	8	34.8	Caucasian	160	95.8		
41-50	2	8.7	Ethnicity				
51 or more	2	8.7	Non-Hispanic or Latino	167	100		
Race			Top Admitting Diagnoses				
Black or African-American	2	8.7	Atrial Fibrillation	23	13.8		
Caucasian	21	91.3	Cerebrovascular Accident	14	8.4		
Ethnicity			Chest Pain	15	9		
Non-Hispanic or Latino	23	100	Congestive Heart Failure	16	9.6		
Highest Level of Education			Myocardial Infarction	14	8.4		
Associate degree in Nursing	4	17.4	Pneumonia	14	8.4		
Bachelors of Science degree in Nursing	19	82.6	Other Diagnoses	71	42.4		
Years of Experience			Sample from follow-up periods				
Less than 1 year	3	13	1-month	67	40.1		
1-5 years	9	39.1	2-month	100	59.9		
6-10 years	4	17.4					
11-20 years	4	17.4					
21 or more years	3	13					

RNs Completing Education

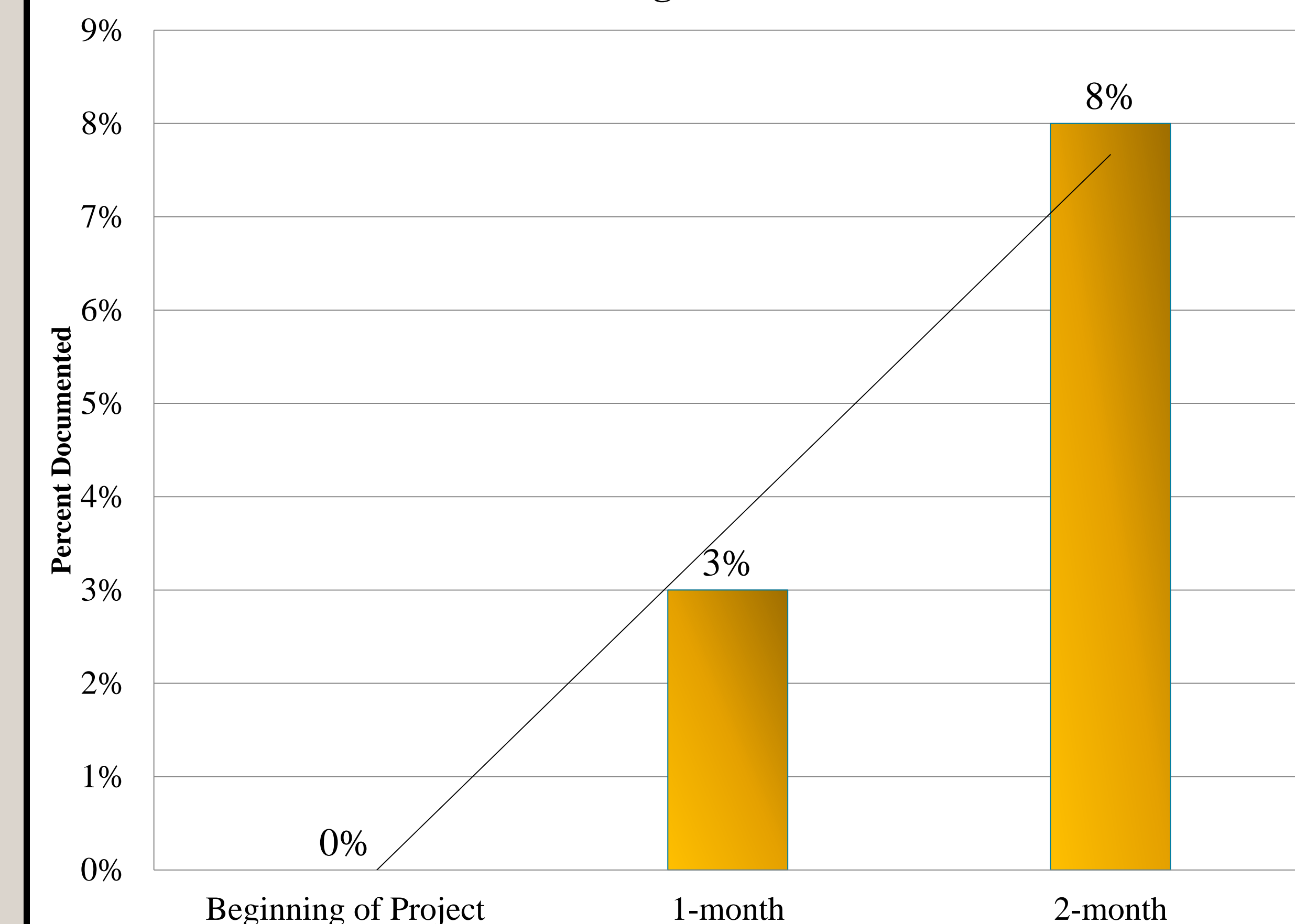


- OBJECTIVE #1 MET:** Approximately 78.6% of assigned RNs completed the computer-based learning unit.
- OBJECTIVE #2 NOT MET:** Only 3% (n = 2) of the sampled charts (n = 67) contained a completed CAM screening at 1-month. Only 8% (n = 8) of the sampled charts (n = 100) contained a completed CAM screening at 2-months.
- OBJECTIVE #3 NOT MET:** There were no positive screenings.

CONCLUSIONS

- Limitations**
- Short project timeframe, pilot unit leadership support, and non-user friendly electronic medical record documentation.
 - Future sustainability will need to factor in these limitations and have management leader supporters.
- Conclusions**
- No statistical significance was seen with CAM completion at 1-month and at 2-months.
 - Results are clinically significant.
 - CAM screening use began with a rate of 0%, improved to 3% at 1-month, and increased to 8% at 2-months. A steady increase was observed.
- Recommendations**
- Continue project with nurse residency program meeting their evidence-based practice requirements.

CAM Screening Documentation



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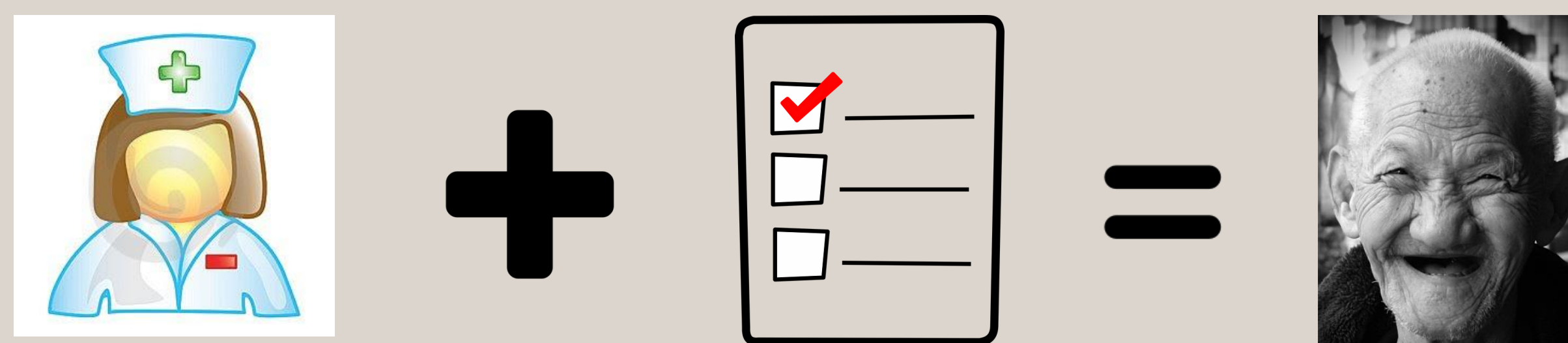
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