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Reducing Delirium and Functional Decline in Hospitalized Older Adults: Pre-Implementation of CoCare HELP

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DNP Project

Entitled: Reducing Delirium and Functional Decline in Hospitalized Older Adults: Pre-Implementation of CoCare HELP®

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DNP Project Plan Defense Modifications

Several modifications were made to the DNP Project Plan and Table 1 shows which implementation strategies were partially completed or not completed. The overriding reason for partially and not completed items was due to the COVID-19 pandemic and surges in hospitalizations. These conditions led to inadequate financial resources and personnel to complete certain aspects of the DNP Project Plan as intended.

Implementation strategies that were partially completed included creating a clinical team, a portion of education and training, budget development, and audits with feedback and satisfaction scores. The utilization of volunteers to assist with the CoCare Hospital Elder Life Program® (HELP) was delayed because the healthcare system had never used volunteers to assist with patient care in the capacity that this program requires. After multiple meetings with the health system volunteer department to discuss the role of the volunteer in CoCare HELP®, the site Volunteer Department Director determined that the current volunteer capacity could not accommodate the program. This led to the development of a University Course for undergraduate students seeking experience in hands-on patient care prior to entering a professional degree program in health care. The course will train undergraduate students to utilize CoCare HELP® volunteer protocol. The proposed budgets for Stages 1 and 2 of the project were altered because the pilot study was not feasible to conduct during stage one due to

COVID-19 surges. The proposed pilot will now be implemented during Stage 2a of the project, rather than Stage 1. Due to the fact that the pilot will be performed during Stage 2a, Stage 1's budget needs will be considerably less and will focus on gathering the necessary materials and resources needed for the pilot project and system-wide implementation of CoCare HELP®.

Implementation strategies that were not completed included utilizing a clinical team. Rather than implementing the proposed pilot study, the revised Stage 1 of this project analyzed pre-implementation strategies in order to promote successful adaptation of the HELP when COVID-19 surges resolve and program administration is efficacious.

DNP Project Manuscript

Journal of the American Geriatric Society (JAGS)

ABSTRACT

Background: Delirium is a change in consciousness characterized by rapid onset and fluctuating attention, causing impairment in the ability to process and recall information, occurring in 30% of hospitalized older adults. Delirium can increase falls, length-of-stay, mortality, and cost. The CoCare Hospital Elder Life Program® (HELP) is an evidence-based bundle of interventions targeting cognitive impairment, sleep deprivation, immobility, visual/hearing impairment, and dehydration, embedding geriatric principles in care to prevent delirium.
Objectives: To further analyze the pre-implementation of the HELP in order to optimize success of program administration.
Methods: Mixed methods were used to collect retrospective/prospective data (interviews (N=25], surveys [N=25], chart audits [N=500]) for an organization assessment from CoCare experts, the hospital, clinicians, and patients. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guided a systematic review on implementation strategies.
Results: A high rate of falls (0.89/1000-days), length-of-stay (6.1 days), readmission rate (12.6%), restraint use (19197 hours), BEERs drugs prescribed (15.4%) and delirium (30.2%) were found. The review identified 10 strategies to guide implementation of HELP: engaging stakeholders/champions, educating staff/patients, clinical team creation/use, facilitation, auditing and feedback, examining satisfaction, and public relations. Products completed included: A University undergraduate course, Registered Nurse education, an Implementation Toolkit, clinician competency checklists, system budgeting plan, system sustainability plan, project analysis plan, recruitment fliers and Epic documentation format.
Conclusions: Use of HELP can prevent delirium. The identification of a high rate of delirium was confirmed in the hospital. The products developed will enable the hospital to implement HELP over the next year.
Implications: Delirium is prevalent among the population of interest and is associated with significant risks; however, pre-implementation of the HELP will promote a successful program launch to reduce delirium in the elderly.

Keywords: Hospital Elder Life Program. AGS CoCare HELP®. Hospitalized older-adult

delirium. Sharon Inouye. Delirium prevention.

MANUSCRIPT

Introduction

Delirium is a change in consciousness characterized by rapid onset and fluctuating course of attention, impairing the ability to process and recall information.[1] Delirium occurs in approximately 30% of hospitalized older adults and affect more than 2.6 million older adults annually.[2-4] Delirium is associated with increased falls, length-of-stay (LOS), mortality, and higher costs in older adults who are hospitalized.[2-4]

Delirium is difficult to assess and treat, due to the variability in precipitating and predisposing factors, as shown in the Multifactorial Model for Delirium (Figure 1).[5] To prevent delirium, multiple factors need to be addressed.[5] The Gold Standard intervention to address delirium is the CoCare Hospital Elder Life Program® (known as "CoCare HELP®") which is a bundle of evidence-based interventions that can be used to prevent delirium and functional decline in older adults.[2] This intervention has a streamlined, stepwise approach, and aims to embed fundamental geriatrics principles into existing care structures.[2] CoCare HELP® reduces delirium by 30%, falls, LOS, and cost in hospitalized among older adults.[6]

Health System Assessment

An assessment of a Midwestern health system was conducted guided by The Burke-Litwin Causal Model;[7] and strengths, weaknesses, opportunities, and threats were analyzed.[8] Leadership was supportive, forming an interdisciplinary Expert Implementation Team (EIT) of stakeholders and purchasing CoCare HELP® to prevent delirium among their hospitalized adults age 70 and older. Delirium education for registered nurses (RNs) had not been conducted; delirium assessments were only done in intensive care units; and few interventions were enacted to prevent delirium. The electronic health record could be adapted to incorporate an assessment and the intervention. Retrospective audits of adults age 70 and older in the health system, a

30.2% rate of delirium, 12.6% readmission rate, 22.2% rate of use of antipsychotics/BEER contraindicated medications, and 6.7 days LOS were found. These poor outcomes demonstrated a need for delirium prevention in the health system.

Simultaneously, the leadership had a desire to become an Age-Friendly Health System (AFHS), to best care for older adults using the 4Ms: What Matters, Medication, Mentation and Mobility.[9] Notable geriatric experts have identified CoCare HELP® as an evidence-based intervention that addresses of the 4Ms of the Age Friendly Health System initiative.

Purpose

The assessment led to the clinical practice question: *Will the implementation of a CoCare HELP® an evidence-based program to prevent and reduce the incidence of delirium reduce 30-day readmission rates, LOS, and falls with injuries in hospitalized adults greater than 70 years of age?* Therefore, the purpose of this paper was to report on a project in a Midwestern healthcare system that purchased CoCare HELP® to prevent delirium. analyzed the impact of delirium in a health system, reviewed strategies to implement HELP, and created products to implement. First, the rate of delirium, falls, readmission, contraindicated medications, and LOS among adults 70 years of age and older was determined. Second, evidence-based strategies to promote uptake of HELP were identified; and selected. Third, internal (stakeholders) and external (other CoCare HELP® users) experts were engaged. Fourth, products to support implementation in the health system were developed. Finally, an evaluation plan to quantify return on investment and examine outcomes was devised.

Methods

Mixed methods (pre-/post-comparison; thematic analysis) were used to conduct program development, evidence-based practice implementation, and quality improvement. The setting was a health system in the Midwest with 3 adult hospitals that had 1397 beds and 24 units that

could benefit from the intervention. Participants were health system leadership, EIT members, clinicians, and patients; university faculty, staff, and students; and users of the intervention from other health systems.

Intervention

CoCare HELP® was designed as a multi-modal intervention to prevent delirium and functional decline in hospitalized older adults.[2] An interdisciplinary team consisting of a Geriatrician, Elder Life Nurse Specialist (ELNS), Elder Life Specialist (ELS), along with volunteers address geriatric concerns that contribute to cognitive and functional decline.[2] A delirium assessment, based on factors in the Multifactorial Model for Delirium,[5] is conducted on those 70 years of age and older to identify those at risk of delirium (Figure 1). If a patient is identified at risk of delirium, an individualized plan of care is devised using the CoCare HELP® protocol (orientation, vision, hearing, early mobility, fluid repletion, feeding assistance, sleep enhancement and therapeutic activities).[2] The interdisciplinary team and volunteers enact care for the patient to prevent delirium.

Approach

The authors completed ELNS, ELS, and volunteer training to enhance knowledge of the intervention. A literature review identified 10 strategies to facilitate implementation. A two-phased approach to implement CoCare HELP® was designed and approved by the EIT. Phase one included RN education on assessment of delirium risk, a pilot project (training the clinical team/volunteers; and use on 1-unit), designing an implementation toolkit, and obtaining funding the ELNS/ELS positions. Phase two was deployment to all adult units in the health system. The pilot project was delayed due to the COVID-19 pandemic; thus, products were prepared for implementation.

Measures

Financial and systems measures included full-time equivalents and cost projections. Patient measures included falls, LOS, readmission rates, restraint and medication use in hospitalized adults 70 years of age and older (pre/post-implementation). Fall rates were assessed per 1000 days; LOS was days admitted; readmissions were percent returning with 3-months of discharge; restraints were hours used; medications were percent prescribed (barbiturates, antidepressants, benzodiazepines, anti-psychotics). The Ultra-Brief Confusion Assessment Method (UB-CAM) was used to audit charts (N=500) to establish the baseline delirium rate. UB-CAM has a sensitivity of 93% and specificity of 95% for detection of delirium.[22] Surveys with open-ended questions designed by the authors guided interviews and field notes captured information from EIT members, experts, stakeholders, and university faculty.

Data Collection

Retrospective and prospective data were collected through interviews, surveys and chart audits from CoCare HELP® experts, the hospital system via the quality improvement team, clinicians, and patients. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses guided the systematic review on implementation strategies.[17] Retrospective system, financial, and patient data were provided by the site.

Analysis

Project analysis was divided into qualitative and quantitative methods. Quantitative analysis consists of descriptive statistics comparing pre-implementation and post-implementation data (Table 3). A qualitative sustainability plan identified several methods to maintain HELP expansion and recognize hospital leader expectations (Table 4). Descriptive statistics (SPSS) were used to analyze system, financial, staff, and patient outcomes. Thematic analysis was used to examine survey, interview, and field note data.

Ethical Considerations

Internal Review Board non-human research determination was obtained from the site. Identifiable data were stored on a health system drive; and de-identified prior to analysis.

Results

The literature review identified 10 strategies to guide implementation of the intervention (Figure 2; Table 2).[6, 11-12, 16, 18-21] Strategies include to conduct organizational assessment, engage key stakeholders, identify and prepare champions, conduct education and training, and create a clinical team. Also included were internal and external facilitation, auditing and feedback, measuring satisfaction, and conduct of public relations. Strategies utilized in the project are discussed in detail.

Pre-implementation data on hospitalized adults 70 years and older in the health system were collected to complete the organizational assessment; and results were reported to the EIT. High fall rates among individuals greater than the age of 70 were expressed with a rate of .89 per 1000-days (Figure 3). LOS mean was 6.06 (SD) days (Figure 4) compared to post-implementation of CoCare HELP mean LOS of 3.69 days.[23] Readmission rates were 12.6% (Figure 5). Hours of patient restraint were 19197 (Figure 6). Percentages of antipsychotics prescribed to adults greater than the age of 70 was 4.8% (Figure 7). BEERs medications used were 15.4% (Figure 8) including barbiturates (.2%), antidepressants (1.4%), and benzodiazepines (13.9%). The health system delirium rate was determined by reviewing 500 hospitalized older adult records (2018 to 2019) prior to COVID-19 pandemic (Figure 9; Appendix 2). Average length of time per audit was 13 minutes and 7 seconds. A delirium rate of 30.2% was found, comparable to nationwide delirium rates.[4] Findings were reported to the health system delirium improvement team, the acute care management team, and leadership to facilitate understanding and the need for delirium prevention within the health system. The “organizational assessment”

strategy was completed; and "audit and feedback" strategy was partially completed.

Internal and external stakeholders were engaged through multiple methods. This included meetings, interviews, Email, blog posts, coaching calls and written reports. The "engage stakeholders" strategy was completed.

A site-specific implementation toolkit, as a quick resource for nurse managers on units implementing the intervention was developed (Appendix 1). The toolkit contains all of the program information including enrollment, programs and protocol, volunteer training, role specific interventions, RN Brief-Confusion Assessment Method (b-CAM) education, job descriptions, and forms for documentation. The "engage stakeholders" and "facilitation" strategies were completed; and "education and training" and "public relations" were partially completed.

A clinical team was created to implement the intervention. The site mentor (geriatrician) requested approval of full-time equivalents (FTE) for the ELNS (1.0 FTE) and the ELS (0.6 FTE) positions needed to implement the intervention. The "create a clinical team" strategy was partially completed.

Multiple meetings with the health systems volunteer department led to the development of an undergraduate course for a local University to train volunteers to assist with implementation of the intervention protocol. The course, entitled and aligned with the AFHS, will include a 48-hour placement with experiential hands-on care in the health system. A syllabus of record was designed and approved by the College of Nursing curriculum committee. A syllabi and course calendar (Appendix 3), 58-item competency checklist, 3 rubrics (Appendix 4), 4 quizzes (Appendix 5), an essay exam (Appendix 6), a syllabus (Appendix 7), 43 activities (Appendix 8) and lessons, 5 readings (Appendix 9), simulation standardized patient training (Appendix 10), and a simulation lab outline (Appendix 11) were created. "Create a clinical team"

and “education” strategies were further partially completed.

An educational module was developed for RNs on delirium and assessment of risk of delirium. Review of the module included defining delirium and prevalence among older adults, discussing the components of hospital-acquired delirium, identifying the lack of current protocol, demonstrating the features of the new b-CAM flowsheet, and finally distinguishing charting expectations for future delirium assessment. The risk assessment included the b-CAM, an evidence-based tool to assess delirium[24] which is pivotal to the CoCare HELP® program. The training walks through components of b-CAM screening, charting requirements and procedure, and next steps for positive and negative b-CAM results (Appendix 12). This further supported the strategy of “education and training” being partially completed.

An ELS and ELNS competency checklist was developed that includes modules to be completed, forms, and protocol (Appendix 13). The checklist will be used to guide the site in training and implementation of the ELS and ELNS roles. This further supported the strategy of “education and training” was partially completed.

Internal and external facilitation was conducted. Internal facilitation occurred with the EIT at the site through 5 meetings, 5 updates via written email report and two internal interviews. External facilitation occurred through 2 interviews, 4 blog posts and 8 coaching calls with experts. The “facilitation” strategy was completed.

A smartphrase was created for documentation within the electronic health record (Appendix 14). The phrase will be utilized by the ELS and ELNS to inform the care team of the inclusion criteria, testing conducted, protocol enacted, and contact information for the team leads. The “audit and feedback” strategy partially completed.

To assess satisfaction within the organization, the Press-Ganey and Glint survey data will be compared pre-and post-implementation. This data will be collected during the pilot study. The "satisfaction" strategy was partially completed.

A budget for the health system was developed to implement the intervention on one unit for a pilot study (Figure 10) and for system-wide adoption (Figure 11). The budget consisted of delirium prevention cost mitigation divided by the cost per capita for delirium prevention ($710100 over six months). Income came from a grant award ($1500) and in-kind project management ($52500). Despite clinical team wages ($18698), RN education cost ($1082), and patient supplies ($4500), the pilot study was expected to net $688322 in savings due to the cost mitigation from delirium prevention ($2700 per case).[4] The budget developed for system-wide adoption of the intervention identified a net of $10643540 in cost savings annually due to delirium prevention. Adoption of the intervention found significant return on investment.

Discussion

Key findings included identification of significant delirium risk factor prevalence among the population of interest, as well as, delirium prevalence in adults. An additional key finding was the identification of evidence-based strategies to promote uptake of the intervention.[6, 11-12, 16, 18-21] Strategies promoted use of a University undergraduate course to train volunteers, RN education, a site-specific implementation toolkit, clinician competency checklists, budgeting, and a sustainability plan. Chart audits identified a 30.2% rate of delirium in older adults in the health system; which was comparable to that found in the literature (30%).[2] Similar to what is found in the literature, the intervention would likely prevent delirium, reduce falls, LOS, and readmission rates, and reduce costs in older adults within the health system.[2] The impact of this project on the hospital system will be significant due to the cost savings (Figures 8-9) and improved patient outcomes linked with CoCare HELP®.

Sustainability

Sustainability of this project was determined by cost assessment and evaluation of return on investment. Once implemented, CoCare HELP® is expected to save the hospital system over a million dollars annually if delirium were prevented. This includes covering the cost of lead staff salaries, RN education, patient supplies, and maintenance of subscription to CoCare HELP®. While results of this pre-implementation are not generalizable, similar hospital systems can interpret these results to determine if CoCare HELP® would be beneficial.

Limitations

Results of the project are not generalizable and are specific to the hospital system. Factors that limit internal validity include that the health system has not allowed volunteers to have patient contact historically which may pose a barrier to adoption of the program, as well as, complications related to implementation, advocacy, and timeliness due to the COVID-19 pandemic. Additionally, the COVID-19 pandemic did not allow completion or partial completion of the implementation strategy utilizing a clinical team. This was due to multiple conflicting factors within the health system.

Acknowledgments

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Figures

Figure 1. Multifactorial Model for Delirium

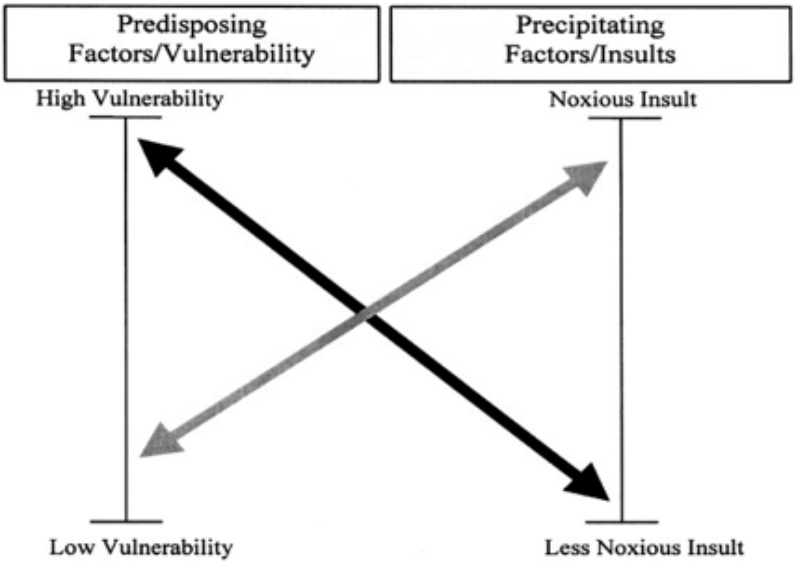


Figure 2. PRISMA

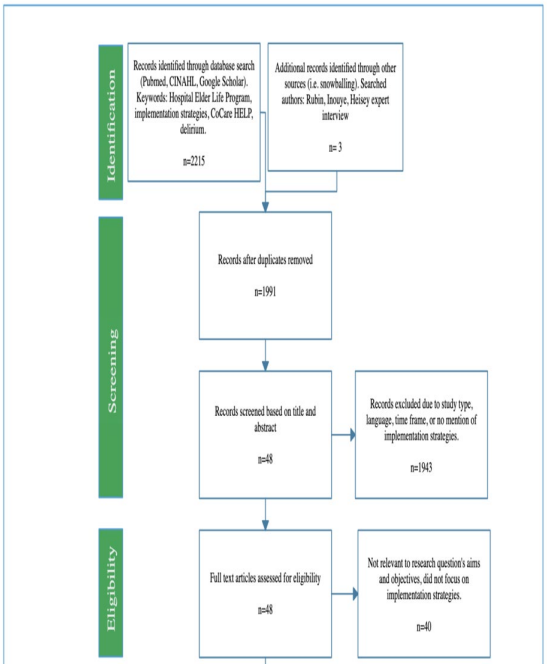


Figure 3. Pre-implementation Fall Rates

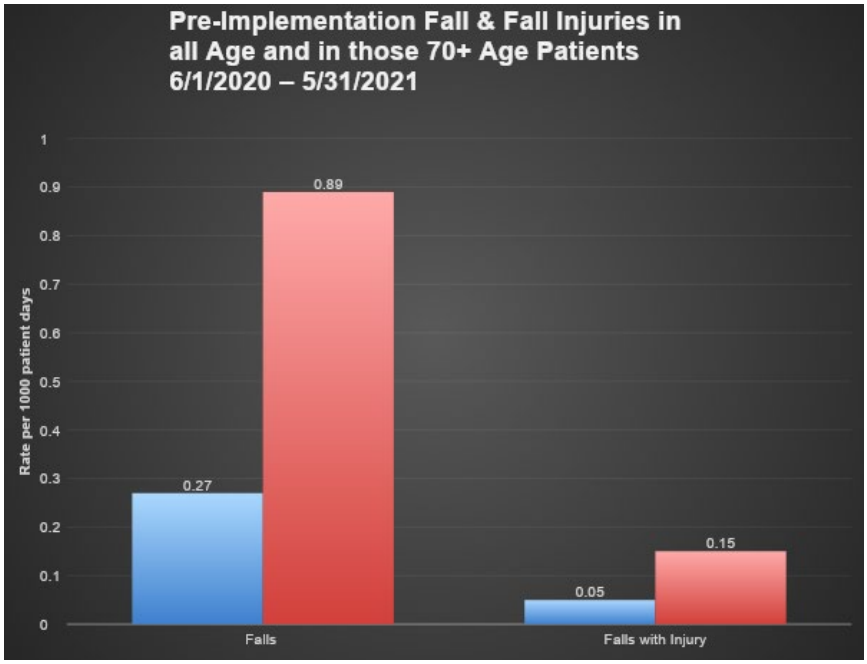


Figure 4. Pre-implementation LOS

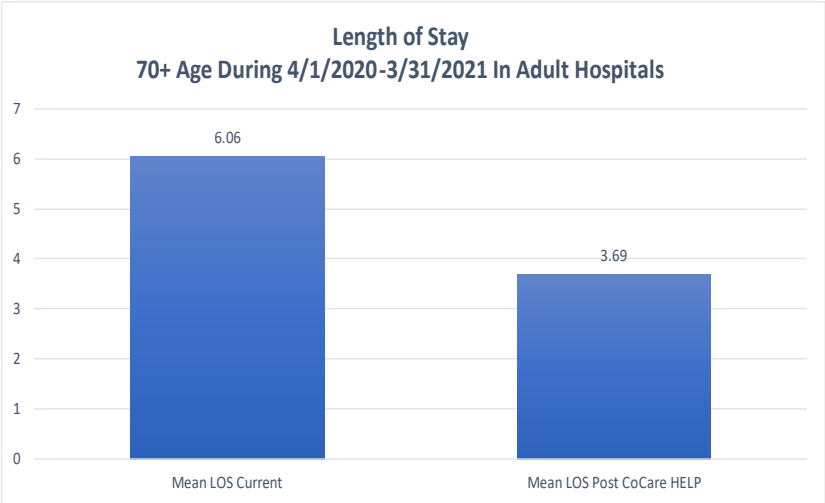


Figure 5. Pre-implementation Readmission Rates

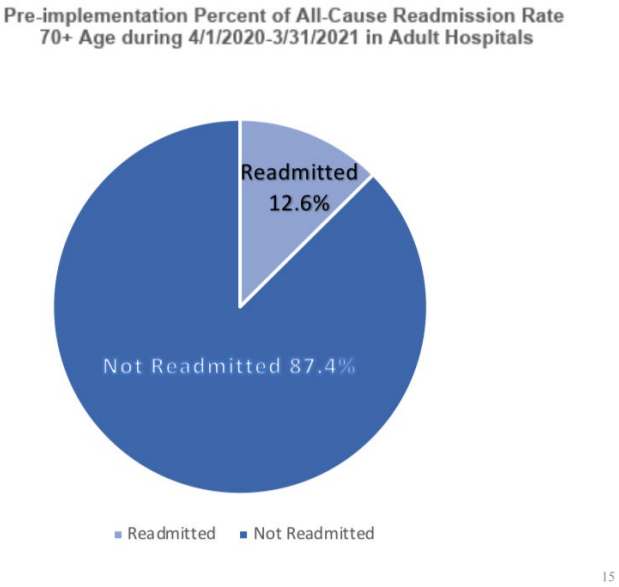


Figure 6. Pre-implementation Hours of Patient Restraint

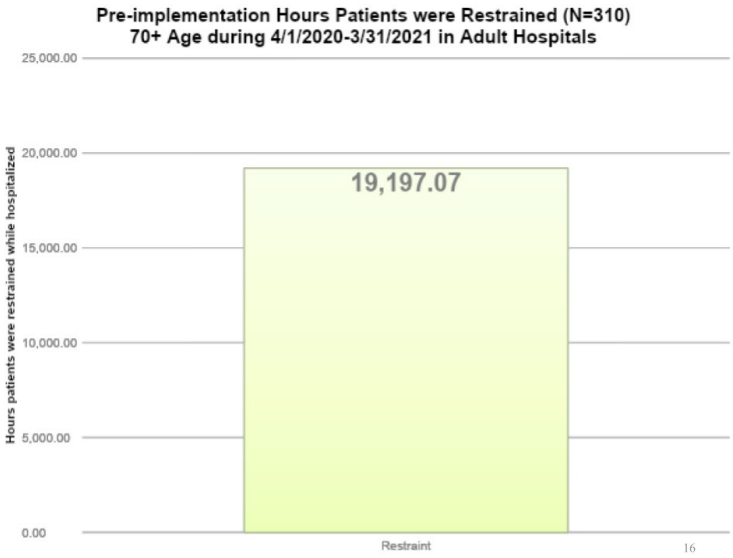


Figure 7. Pre-implementation Anti-Psychotic Prescriptions

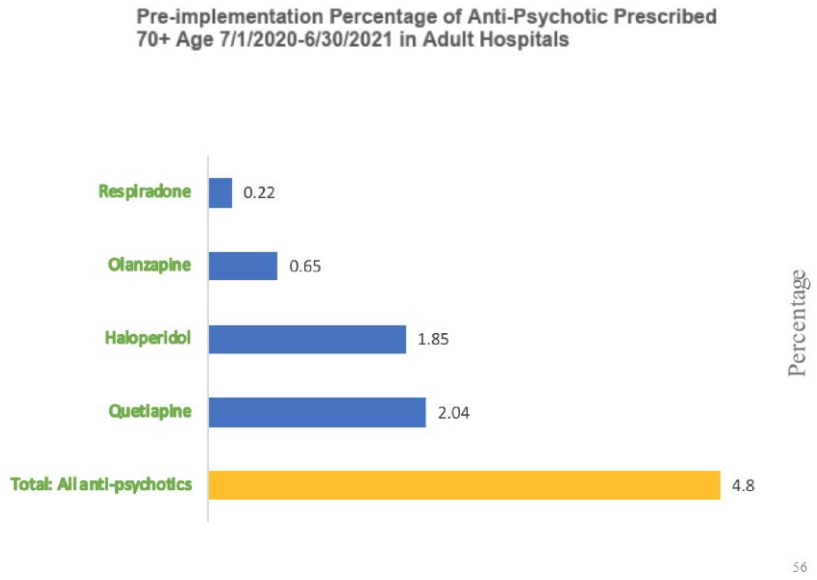


Figure 8. Pre-implementation BEERS Prescriptions

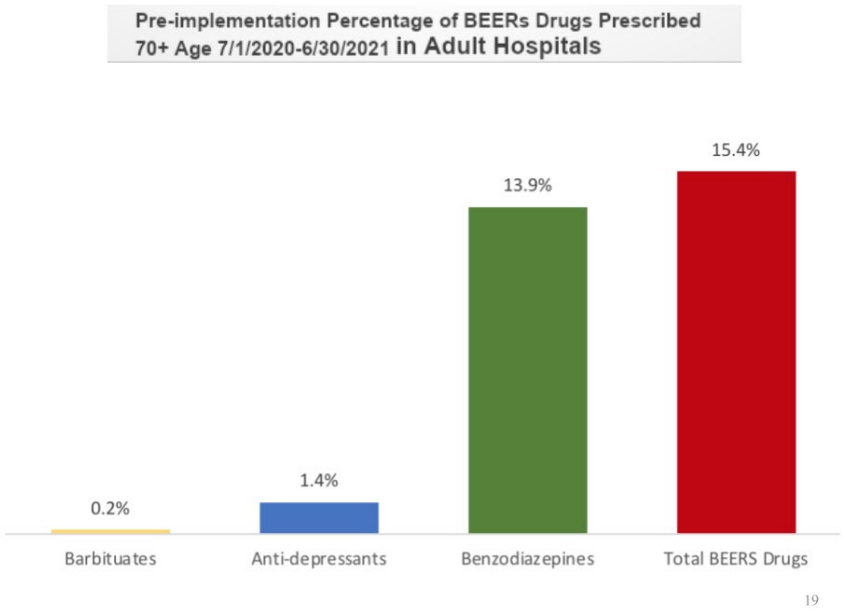


Figure 9. Baseline Delirium Rate at Hospital System

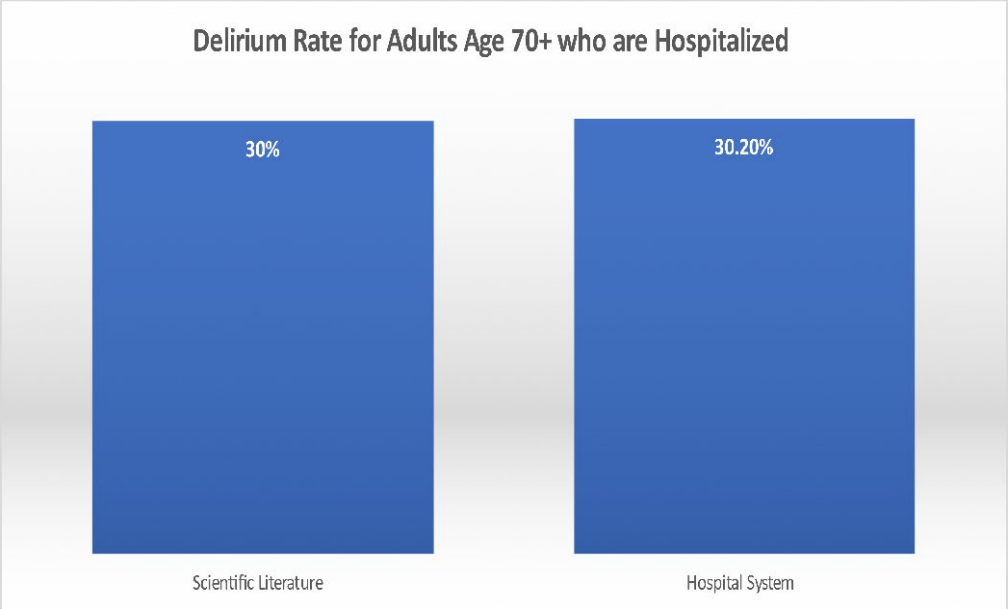


Figure 10. Budget for Pilot Study

Budget & Resources: Pilot (1 Unit)

Cost Mitigation if Delirium is Prevented using CoCare HELP *Pilot*	
Cost per capita saved if one delirium case is prevented	$2,700
Cost per capita saved if 264 delirium cases are prevented	**$710,100**
Income for Implementation Pilot Project	
GVSU Presidential Award (one per student at $1,500 each)	+$1,500
Project Managers (DNP Students; 400-hours each; In-kind)	+$52,500
Total Income	**+$54,000**
Expenses for Implementation of Pilot Project	
EIT members wages/benefits (monthly meeting); QI support	-$18,698
Project Managers (DNP Students; 400-hours each; In-kind)	-$52,500
RN (43) wage/benefits for b-CAM education (pilot unit)	-$1,082
Supplies for preparing implementation bundles, flyers	-$500
Patient Supplies to conduct CoCare HELP during Pilot	-$4,000
Total Expenses	**-$75,880**
Cost Savings From CoCare HELP *Pilot*	**+$688,322**

Figure 11. Budget for System-Wide Adoption

Budget & Resources: System-Wide Adoption

Cost Mitigation if Delirium is Prevented using CoCare HELP	
Cost per capita saved if one delirium case is prevented	$2,700
Annual cost saved if prevent 4,230 cases of delirium on adult units in primary site (not outlying hospitals)	$11,421,000

Expenses for Implementation of CoCare HELP in Adults (Primary Site)	
Lead Staff (Director, Geriatrician, ELNS, ELS)	-$483,850
Patient Supplies ($57/case)	-$241,110
RN wage/benefits for b-CAM education	-$52,500
Total Annual Expenses in primary site (not outlying hospitals)	-$777,460

Annual Cost Savings from CoCare HELP in primary site (not outlying hospitals)	$10,643,540

Tables

Table 1. Pre-implementation Strategy Changes

Strategies Completed	**Strategies Partially Completed**	**Strategies Not Completed**
#1. Organizational assessment. **#2.** Engage stakeholders. **#3.** Identify champions. **#7.** Facilitation.	**#4.** Create a clinical team. **#5.** Education and Training. **#8.** Audit and feedback. **#9.** Satisfaction. **#10.** Public Relations.	**#6.** Utilize a clinical team.

Table 2. Literature Review

Table Evidence to support project plan: Strategy concept per Powel et al,[10] rate of occurrence in literature review, and source of strategy recommendation.

Strategy concept per Powell 2015	Rate of occurrence	Source of strategy recommendation
Education & training	9	Chen (2017); Young (2021); McClay (2021); Mudge (2018); Huson (2016); Steunenberg (2018); Wang (2020); McClay (2021); expert recommended
Audit & feedback	6	Young (2021); Mudge (2018); Hshieh (2020); expert recommended; Wang (2020); McClay (2021)
Champions	6	Mudge (2018); expert recommended; Young (2021); Huson (2016); Hshieh (2020); Wang (2020)
Facilitation (internal)	6	Young (2021); Mudge (2018); McClay (2021); Hshieh (2020); Wang (2020); McClay (2021)
Intervention adaptation and/or modification	6	Hshieh (2020); Chen (2017); Young (2021); Huson (2016); Wang (2020); McClay (2021)
Family engagement	5	Hshieh (2020); Mudge (2018); Huson (2016); Wang (2020); McClay (2021)
Assessment	4	Young (2021); McClay (2021); Mudge (2018); expert recommended

Buy-in	3	McClay (2021); Young (2021); Mudge (2018)
Satisfaction (patient/staff)	3	Huson (2016); Steunenberg (2018); expert recommended
Create new clinical teams	2	Chen (2017); Young (2021)
Quality monitoring tools	2	Hshieh (2020); Wang (2020)
Key stakeholder	2	Mudge (2018); expert recommended
Stakeholders	2	Mudge (2018); expert recommended
Shadow other experts	1	Young (2021)
Visit other sites	1	Young (2021)
Provide clinical supervision	1	Mudge (2018)
Purposely reexamine implementation	1	Mudge (2018)
Dynamic training	1	Huson (2016)
Facilitation (external)	1	Mudge (2018)
Coaching	1	Steunenberg (2018)

Table 3. HELP Program Measures

AGS CoCare®: HELP

Measures to Consider for AGS CoCare®: HELP Program Implementation Effectiveness

Variable	How Measured	How Reported	Notes
Process Measures			
Number of patients screened or enrolled	• Track daily	• Quarterly Review for program staff • Annual report to administration, indicate if goals met	Can compare with previous years using charts or graphs
Number and description of program staff members and FTEs	• Record initial staffing levels • Record any changes over time	• Include in budget report to department overseeing program implementation • Annual report to administration	Follow your hospital requirements for financial reporting
Number and type of units with program implementation	• Record initial starting units • Record new units added over time	• Review each year to discuss potential for expansion • Annual report to administration, indicate if expansion goals met	
Number of volunteers and total volunteer hours	• Track total number of volunteers trained and active in program • Track daily volunteer hours • Track monthly volunteer hours completed for the program	• Monthly review of volunteer hours and adherence • Quarterly review to plan for ongoing trainings • Annual report to administration, indicate if goals for # of hours are met	Compare hours month to month and year to year to demonstrate progress/expansion of program
Number of volunteer and ELS interventions	• Track volunteer and ELS interventions completed daily • Can be done in Excel or on paper forms	• Monthly review of volunteer hours and adherence to address any adherence issues • Quarterly review for Quality Assurance purposes • Annual report to administration	Important means to pick up intervention problems and identify solutions, such as need for specific volunteer or staff retraining

AGS CoCare®: HELP

Variable	How Measured	How Reported	Notes
Rates of adherence with interventions	• Track if patient receives only part or none of an intervention • Include reasons intervention not completed • Can be recorded by volunteers on paper forms and entered into Excel sheet	• Monthly program review to identify areas for improvement • Quarterly review for Quality Assurance purposes • Annual report to administration	Adherence considered complete if patient receives all parts of assigned protocol for the number of times it was assigned. Program goal is for a minimum of 80% adherence with all interventions.
Outcome Measures*			
Length of stay	• Obtain from administrative data or medical record • Track enrolled patients	• Compare with non-program units • Include in annual report	Can be used to calculate financial benefits of program implementation
Fall rates	• Review administrative data in medical record	• Compare with non-program units (same type of unit, comparable patient age) • Include in annual report	
Incidence of delirium	• Administer CAM or review patient records for total # of days delirium that occurred	• Calculate the rate of delirium in your program; can be compared to non-program units to show reduction in delirium rates • Include in annual report	Compare incidence of delirium in program enrolled patients and non-enrolled patients or compare pre-intervention & post-intervention incidence of delirium on the same units
Cognitive decline	• Use SPMSQ or Mini-Cog scores at admission and discharge	• Report on enrolled patients who improved or maintained cognitive status between admission and discharge • Include in annual report	Can use any cognitive assessment utilized in your program implementation
Functional decline	• Use ADL/IADL score at admission and discharge	• Report % of enrolled patients with improved or maintained mobility from admission to discharge • Include in annual report	Can use any functional assessment utilized in your program implementation

AGS CoCare®: HELP

Variable	How Measured	How Reported	Notes
Discharge destination of enrolled patients	• Track discharge destination of all enrolled patients when discharged or through follow-up survey	• Include in annual report	Discharge destinations include: home with no services, home with services, post-acute care, nursing home, deceased, other
Readmission rates	• Track readmission rates of enrolled patients in 30- or 90- day period • Use administrative data or medical records	• Include in annual report	Important CMS and quality measure. Can be used to calculate financial benefits of program implementation
Qualitative Measures			
Patient satisfaction with program implementation	• Administer surveys to enrolled patients and caregivers/family members at time of discharge for every patient	• Annual report to administration • Pick out quotes from open-ended questions for annual report or newsletter, etc.	View the program's patient family satisfaction survey for example questions
Staff satisfaction with program implementation	• Administer surveys annually to hospital staff on program implementation units to gauge their satisfaction	• Annual report to administration	Example Question: "Did the program improve your job satisfaction?" Use a scale to rate responses (1= not at all, 2=very little, 3=somewhat, 4= moderate amount, 5=significantly)

**For financial outcomes, please see "Calculating Cost Savings," also located in the Supplementary Materials of the Documenting Effectiveness Module.*

Table 4. Sustainability Plan

Make a strong case for long-term funding early in the implementation process	Maintain regular communication with hospital decision-makers
Develop your business case	Make formal and informal connections at all meetings or committees
Utilize your program data to convince hospital leaders about the program's impact	Present formally to decision-makers, including annual reports of the program outcomes. Include qualitative data and patients' stories
Publicize program results and successes to build support for the program	Utilize hospital public relations and other sources, such as local newspapers, radio, social media, awards, health fairs, and conferences
Consider applying for ongoing grant or donor funding	Search for local foundation grants, hospital auxiliary, grateful patients/families, or donors from your development office
Manage expectations so hospital leaders recognize that implementation may require more than 1 year	Engage multiple program champions and meet with them regularly

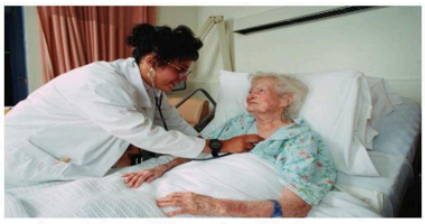
DNP Project Defense Appendices

The following is a list of the Appendices for this project.

Appendix 1. Toolkit

AGS CoCare HELP

American Geriatric Society (AGS)
CoCare Hospital Elder Life Program (HELP)



Implementation Toolkit

This toolkit may be reproduced.

Last Updated: February 22, 2022

INTRODUCTION

Welcome!

The purpose of this Toolkit is to provide Unit Managers, Clinical Nurse Specialists, Registered Nurses, and other members of the clinical team on units where CoCare Help (known as "CoCare") is being used, background information on the intervention.

This Toolkit is for informational purposes and not intended to replace the health systems policies, procedures, workflow documents, or management structures. If there are concerns or questions, contact the Unit Manager.

We hope this Toolkit will be helpful.

Content Source:

AGS CoCare HELP

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Table of Contents

Section 1: An Overview

Background
Delirium is defined as a change in consciousness characterized by rapid onset and fluctuating course of attention (Ely et al., 2018). Delirium often impairs the ability to process and recall information; and occurs in up to 30% of adults who are hospitalized (Schubert et al., 2018). Nationwide, delirium affects more than 2.6 million older adults a year, accounting for more than $164 billion annually in excess Medicare expenditures (American Geriatric Society [AGS], 2019). Delirium is associated with increased mortality, prolonged length of stay, and higher cost per case (Schubert et al., 2018).

Due to the variance of potential causes of delirium, identification of delirium can be difficult and appropriate treatment varies case by case. Therefore, prevention is critical.

Intervention
The Hospital Elder Life Program (HELP) Program (known as "CoCare") is a bundle of evidence-based interventions that bring geriatric expertise to the forefront of patient care decisions to prevent delirium and functional decline (AGS, 2019). These interventions are implemented by a skilled interdisciplinary team who address geriatrics concerns that contribute to cognitive and functional decline. CoCare has a streamlined, stepwise approach, embedding geriatrics principles into existing care structures (AGS, 2019).

Significance and Impact
CoCare can reduce delirium incidence over 30% in hospitalized older adults, by deploying the evidence-based protocol (AGS, 2019). CoCare can save over $1000 per patient in hospital cost (AGS, 2019). CoCare can also reduce falls, functional decline, length of stay, and decrease sitter use, translating as improved patient outcomes (AGS, 2019). In essence, reducing stress on nursing staff, fewer resources are used through improved consistency of care leading to better patient satisfaction, quality of care, and safety (AGS, 2019). Healthcare systems worldwide are using CoCare.

Care Team
The team consists of a program director, geriatrician, Elder Life Nurse Specialist (ELNS), an Elder Life Specialist (ELS), and trained volunteers.

- The **Program Director** is responsible for tracking quality assurance, verifying that the appropriate staff and materials are in place, ensuring interventional protocols are fully and consistently implemented, and monitoring outcome data. The Program Director is someone with a minimum of 3-5 years of clinical, administrative, and geriatric experience.

- The **Elder Life Nurse Specialist (ELNS) is** a master's prepared advanced practice registered nurse with 3-5 years of geriatric experience (preferred). The ELNS has a variety of responsibilities including geriatric nursing assessment of all program patients, implementation of nursing specific protocols, coordination and consultation with floor nursing and medical staff, participation in rounds, serves as a clinical resource to the team, and overall collaboration with the medical team.

- The **Elder Life Specialist (ELS) and Volunteer Coordinator** are roles undertaken by one bachelor's prepared human services or healthcare related person. Responsibilities include daily screening and enrollment of patients into the program, creating individualized geriatric care plans utilizing CoCare protocols, implementing protocols along with volunteers, assuring volunteer coverage and coordination, and assisting with program operations.

- The **Geriatrician** serves as a part time clinician, consultant, and educator for the CoCare program. They collaborate with the medical team to improve geriatric care as well as provide education to other physicians or healthcare staff.

- The **Volunteers**, after extensive training, follow standardized protocol, as identified by the ELNS with older adults in the CoCare program as assigned under the supervision of the ELS and ELNS.

References

American Geriatric Society. (2019). American Geriatric Society CoCare Hospital Elder Life Program. https://help.agscocare.org/

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Schubert, M., Schürch, R., Boettger, S., Nuñez, D. G., Schwarz, U., Bettex, D., & Rudiger, A. (2018). A hospital-wide evaluation of delirium prevalence and outcomes in acute care patients-a cohort study. BMC Health Services Research, 18(1), 1-12.

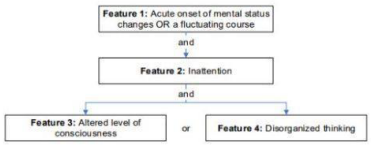
Appendices

Section 2: bCAM Assessment

What is the RN bCam assessment?
The first line of defense to prevent delirium is when the Registered Nurses (RNs) on adult units complete the Brief Confusion Assessment Method which is called the bCAM.
The bCam, a modified version of the CAM-ICU which has been used in the adult ICUs, is a delirium assessment which takes approximately 1 to 2 minutes to perform. In order to conduct the bCAM, the patient must be arousable to verbal stimuli. Patients that are in a stupor or comatose, cannot be assessed for delirium; however, these individuals frequently transition into delirium and should be monitored once arousable to verbal stimulus.

What is the purpose of the bCam?
The bCam has an algorithm to detect issues with:

1) altered mental status/fluctuating course,
2) inattention,
3) altered level of consciousness, and
4) disorganized thinking.



bCam uses objective testing with prespecified cutoffs to determine the presence of inattention and disorganized thinking. In essence a patient must be inattentive, a cardinal feature of delirium, to be bCAM positive.

Acute change in mental status or fluctuating course can be obtained from family member or caregiver; however, if the proxy is unavailable, this feature can be determined after the others have been performed. Common questions to ask:

- "Has the patient been more confused to you lately?"
- "Is the patient acting normally to you right now or does he/she seem more confused than usual?
- "Have you noticed any fluctuations in the patient's mental status where he/she appears to be more confused at some moments and less confused at other moments throughout the course of the day?"

If a patient is identified as having either altered mental status or a fluctuating course, they are considered positive for feature 1.

Inattention can be observed during an assessment:

- Patients who are easily distractible or have difficulty keeping track of what you say are likely inattentive.
- If you frequently have to repeat your questions to the patient and he/she does not have a history hearing impairment, then the patient is likely inattentive.
- Patients who fall asleep during your assessment are likely inattentive.

Have the patient recite the months of the year backwards from December to July. Non-delirious patients will be able to recite the months backwards without stopping. If there is a significant pause (greater than 15 seconds) or if two or more errors are made, inattention is evident and feature 2 is positive.

Altered level of consciousness is determined by observing the patient and using the Richmond Agitation Sedation Scale (RASS). A RASS of "0" indicates normal level of consciousness. A RASS other than "0" indicates altered consciousness and feature 3 is deemed positive. The patient must be responsive to verbal stimulation in order to diagnose delirium. If the patient's RASS score is -4 or -5, they are considered to be in a stupor or coma. While these patients are at high risk for delirium, these patients cannot be assessed for delirium. These patients should be reassessed once they become responsive to voice.

RASS	Description
+4	Overtly combative, violent, immediate danger to staff
+3	Very agitated, pulls or removes tube(s) or catheter(s); aggressive
+2	Agitated, frequent non-purposeful movement
+1	Restless, anxious but movements not aggressive or vigorous
0	Alert and calm
-1	Mildly drowsy, not fully alert, but has sustained awakening (>10 seconds)
-2	Moderate drowsy, briefly awakens with eye contact to voice (<10 seconds)
-3	Very drowsy, movement or eye opening to voice (but no eye contact)
-4*	No response to voice, but movement or eye opening to physical stimulation
-5*	No response to voice or physical stimulation

Disorganized thinking is determined by asking four questions and evaluating a command. Either question set A or B can be used. If the patient makes any errors with either the questions or the command, they are categorized as having disorganized thinking (feature 4). A patient that does not answer questions or makes incomprehensible sounds is considered to be positive as well.

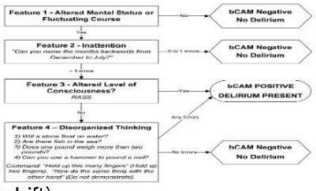
Feature 4: Disorganized Thinking

(Use either Set A or Set B, alternate on consecutive days if necessary):

Set A	Set B
1. Will a stone float on water?	1. Will a leaf float on water?
2. Are there fish in the sea?	2. Are there elephants in the sea?
3. Does one pound weigh more than two pounds?	3. Do two pounds weigh more one pound?
4. Can you use a hammer to pound a nail?	4. Can you use a hammer to cut wood?

Command: Say to patient: "Hold up this many fingers" (Examiner holds two fingers in front of patient). "Now do the same thing with the other hand" (Do not demonstrate). If patient is unable to move both arms, for the second part of the command ask patient "Add one more finger".

Delirium is confirmed when the patient demonstrates positive 1 and 2 Features as well as positive 3 or 4 Features.



Who uses the bCAM?
RNs on adult units (non-ICU).

When is the bCAM used?
Per hospital policy (twice daily, every 12 hours; or once per RN shift).

How is the bCam documented?
bCam flowsheet which is embedded within Epic, if the algorithm detects issues, a flag appears:

- Under Flowsheets
- Select "Cognitive"

Delirium Assessment (bCAM)

- Feature 1: "positive" or "negative"
- Feature 2: "positive" or "negative"
- Feature 3: "positive" or "negative"

Feature 4: "positive" or "negative"
Delirium present results: "positive" or "negative"

What does the RN do if the bCAM is positive?
On units where CoCare is provided, contact the ELNS or ELS.

References

1. Han, J. H. (1990). Brief Confusion Assessment Method (bCAM). *Intern Med*, *113*, 941-948.
2. Inouye, S. K., Leo-Summers, L., Zhang, Y., Bogardus Jr, S. T., Leslie, D. L., & Agostini, J. V. (2005). A chart-based method for identification of delirium: validation compared with interviewer ratings using the confusion assessment method. *Journal of the*

Section 3: CoCare HELP

What are the CoCare clinical components?
When the patient is admitted to a unit doing CoCare, the ELS completes a brief chart review to determine if the patient has any exclusionary criteria. The ELS then describes the program to the eligible patients and families. Interested and eligible patients are then enrolled in CoCare. The ELS and volunteers initiate standing protocol. Simultaneously, the ELNS does additional screening and implements geriatric nursing interventions.

The majority of the protocol target six major risk factors for cognitive and functional decline in hospitalized older patients: cognitive impairment, sleep deprivation, immobility, vision impairment, hearing impairment, and dehydration. Additional interdisciplinary interventions, interdisciplinary rounds and consultation, geriatrician consultation and community linkages occur as needed. Discharge evaluation and post-hospitalization follow-up are conducted.

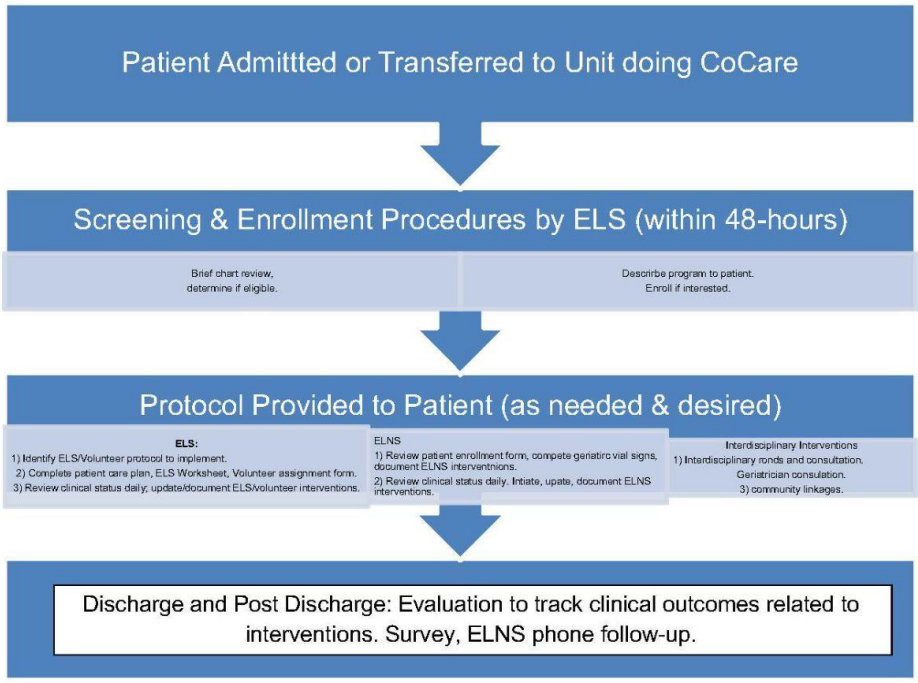
What are team roles?
- ELS is clinical staff and the volunteer director.
- ELNS is an expert in older adults and provides oversight and ensure patients are receiving the appropriate protocol.
- Volunteers, under the guidance of the ELS, implement protocols.

Why does the ELS screen all patients age 70 or older with 48-hours?
- To verify the patient has risk factors for delirium and will benefit from CoCare.
- To identify trigger specific intervention protocol based on the risk factors.

Which patients should receive CoCare?
- Those age 70 years or older and on a unit using CoCare.
- Having one or more of the following risk factors:
    - Cognitive impairment– SPMSQ 2+ errors, equivalent to MMSE <24/30.
    - Mobility or ADL impairment.
    - Vision impairment: <20/70 best corrected vision.
    - Hearing impairment: <3 of 6 whispers in each ear on Whisper test or unable to hear fingers lightly rubbed together 3-4 inches from ear on the Finger Rub Test.
    - Dehydration: BUN/CR ration ≥18.
- Those able to communicate verbally or in writing (if nonverbal).

Which patients should not receive CoCare?
- Those in a coma or on mechanical ventilation.
- If aphasiac (expressive/receptive) or if communication is severely impaired.
- If terminal condition with comfort care, or if death is imminent.
- If combative, has dangerous behavior, or a has severe psychotic disorder.
- If has severe dementia.
- If in airborne precautions, on contact isolation, or droplet precautions.
- Neutropenic precautions.
- Discharge anticipated within 48 hours of admission.
- Refusal by patient, family member (if patient is incompetent), or physician.

What is the clinical process?



Where is CoCare used?

- On units using CoCare.

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Appendices

Criteria & Guidelines- Clinical Guidelines page #
https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART002_001/121

Section 4: ELNS
Elder Life Nurse Specialist

What does the ELNS do?
The ELNS holds the central clinical role within the program; provides geriatric clinical assessment, interventions, and education. Completes geriatric vital signs for each patient and records. Geriatric vital signs include cognition, psychoactive medication use, sleep, functional status, mobility, sensory function, hydration and nutrition, incontinence issues, skin, emotional health, social issues, discharge planning, and education. The ELNS performs daily clinical reassessment to determine if changes are needed. Responsibilities include patient care, implementing interventions, discharge planning, staff education, and program operations.

ELNS Protocol
There are eight protocols ELNS utilizes to conduct their role. Each will be described.

- **Delirium Protocol**- ELNS monitors the cognitive status of all patients daily. This is accomplished through personal interview, chart review, interviews with staff and family, and review of bCAM documentation in EPIC. For patients with evidence of cognitive impairment, a baseline is determined and changes documented over time. The ELNS collaborates with nursing and medical staff to facilitate appropriate medical workup and management as well as implements non-pharmacological interventions such as creating an optimal environment, orienting communication with the patient, behavioral strategies, and involving family.

- **Dementia Protocol**- ELNS monitors the cognitive status of all patients daily. For patients with dementia the ELNS recommends a focus on social situation/caregiver needs, activities of daily living, nutrition, and sleep. The ELNS coordinates with nursing and caregivers and provides education on dementia.

- **Psychoactive Medications Protocol**- ELNS performs medication reconciliation on all enrolled patients and screens the daily medication list for medications associated with delirium. If potentially harmful medications are recognized, the ELNS coordinates with providers and makes recommendations for dose adjustment, discontinuation, and/or selection of alternate medications. The ELNS coordinates with the pharmacy to provide regular in-services and education regarding medications in the geriatric population.

- **Sleep Enhancement Protocol-** Eligible patients include any patient requesting or using a sedative-hypnotic medication or any patient having difficulty sleeping. Interventions include rearranging the timing of medication administration and nursing treatments to minimize night-time awakenings (in conjunction with the medical staff). Making recommendations for non-pharmacologic interventions such as a warm drink, hand or back rub, noise reduction, and dim lighting which can be implemented by the ELS or volunteer team. Provides regular education for nursing staff on sleep issues in the geriatric population.

- **Early Mobilization Protocol-** ELNS determines each patient's physical limitations and ability to participate in the early mobilization protocol. Determines the need for PT or OT consultation. ELNS provides constant surveillance of patient's ability and readiness to

participate in the Early Mobilization Protocol. Provides education to the patient and caregiver aimed at maximizing mobility. The ENLS assesses mobility by looking at bed mobility, sitting balance, sit and rise from a chair, standing balance, gait, and stand to sit activities.

- **Hearing Protocol-** Eligible patients include those who wear hearing aids, have difficulty with the whisper test, or the finger-rub test. A hearing screening is conducted upon enrollment to the program. The ELNS evaluates for cerumen impaction and facilitates removal (Debrox or ENT referral).

- **Fluid Repletion Protocol-** The ELNS assesses each patient daily for signs of dehydration. If dehydration is present, the ELNS implements strategies to improve fluid status. Collaboration with the medical team is an essential part of this protocol.

- **Discharge Planning Protocol-** Describes the role of the ELS in discharge planning. This is conducted in conjunction with existing discharge planning services offered by the hospital system. Considerations include home care, senior services, and other needs.

There are several optional interventions, each will be described.

- **Interdisciplinary Interventions-** These include twice weekly rounds with the interdisciplinary team, geriatrician consult on any specific geriatric issues, and providing interdisciplinary consultation as needed for medical staff.

- **ELNS Pain Management Protocol-** ELNS screens all enrolled patients daily for eligibility. High risk patients include post-surgical patients, trauma patients, and those with severe or chronic medical illnesses associated with acute or chronic pain. ELNS performs a pain evaluation using Epic and patient/ caregiver interviews. Pain scales are tailored to each individual patient based on their cognitive and verbal ability. Interventions include communicating pain levels to provider, teaching patients and caregivers to report pain status regularly and recognize barriers to pain management. The ELNS advocates for the use of acetaminophen to augment other pain medications (when appropriate), recommends complementary therapies (e.g., ice or heat, relaxation techniques, meditation, prayer, or spiritual support), and environmental modifications or repositioning to reduce pain.

- **ELNS Prevention of Catheter Associated UTI (CAUTI) Protocol-** This protocol is to be utilized if the health system does not have a superseding protocol in place. Lists the appropriate indications for indwelling catheter use such as acute urinary retention, bladder outlet obstruction, the need for accurate measurements of urinary output in critically ill patients, post-op for select surgical patients, to assist in healing of open sacral or perianal wounds in incontinent patients, patients requiring prolonged immobilization, and to provide comfort for end-of-life care if needed.

- **ELNS Constipation Protocol-** To be utilized if the health system does not have a superseding protocol in place. Eligible patients include those with clinical evidence of constipation (straining at stool, difficulty passing stool, infrequent bowel movements, and dehydration). The ELNS assessed each enrolled patient daily for constipation recognizing risk factors such as dehydration, specific medications (see list in appendix), poor mobility, a history of constipation or laxative use, and recent abdominal or bowel surgery. Interventions are outlined within the protocol.

When are the ELNS Protocols used?
Daily, or as needed, after the ELNS designs the patient care plan.

ELNS Forms and Documentation
There are four forms the ELNS utilizes. Each will be described. The forms are used to track demographic and care plan data for each individual patient, to assess the patient daily, and to track which interventions were implemented for an individual patient daily.

- **ELNS Patient Profile Sheet-** For documentation upon admission and updated with any daily changes for each enrolled patient. Includes demographics, medical history, cognition, medications, sleep, functional status, mobility, vision/ hearing, hydration/nutrition, continence/ elimination, skin, emotional health, social supports, and discharge planning. Is like a nurse "report" sheet.

- **ELNS Patient Enrollment Form-** The Patient Enrollment Form is the screening tool for enrollment into the program, and it is completed by the Elder Life Specialist, with assistance from the Elder Life Nurse Specialist as needed.

- **ELNS Daily Evaluation Form-** For daily documentation on each of the ELNS protocols and assessments. Orientation, medications, sleep, mobility, hearing, dehydration, discharge planning, and other issues to discuss with ELS.

- **ELNS Interventions Master Tracking Log-** For daily documentation of specific clinical interventions, education, and clinical consults.

When are the ELNS forms used?
Daily when providing care for each patient.

Appendices

Fluid Repletion Protocol page #
https://help.agscocare.org/content/products/H00103/H00103_PART012/Fluid_Repletion_Protocol.pdf

Hearing Protocol page #
https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART011/116

ELNS Interdisciplinary Interventions page #
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ELNS Optional Interventions page #
https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART004_004/163

ELNS Hand Hygiene Protocol page #
https://help.agscocare.org/content/products/H00103/H00103_PART004_004/HandHygieneProtocol_PDF.pdf

ELNS Pain Management Protocol page #
https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNSPainManagmentProtocol_PDF.pdf

ELNS Aspiration Prevention Protocol page #
https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNS_AspirationProtocol.pdf

ELNS Prevention of Catheter Associated UTI Protocol page #
https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNS_CatheterUTIPreventionProtocol_PDF.pdf

ELNS Constipation Prevention Protocol page #
https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNS_ConstipationProtocol.pdf

ELNS Discharge Planning Protocol page #
https://help.agscocare.org/content/products/H00103/H00103_PART013/Discharge_Planning_Protocol.pdf

ELNS Educational Interventions page #
https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART004_005/164

ELNS Patient Profile Sheet page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_003/ELNS%20Patient%20Profile.pdf

ELNS Patient Enrollment Form page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_001/1-Patient_Enrollment_Form.pdf

ELNS Daily Evaluation Form page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_003/ELNS%20Daily%20Evaluation.pdf

ELNS Interventions Master Tracking Log page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_003/ELNS%20Tracking%20Log.pdf

15

SECTION 5: ELS
Elder Life Specialist

What does the ELS do?
The ELS scope of responsibilities include volunteer recruiting, screening, training, scheduling, retention, and continuing education. The ELS provides direct patient care including patient screening and enrollment, developing and updating individualized care plans, implementing the ELS protocols and monitors patients, oversees the volunteers as they implement the Daily Visitor Program, Therapeutic Activities Program, Early Mobilization Program, and the Feeding Assistance Program. The ELS plays a role in program operations by recording and maintaining volunteer progress reports, measuring, and recording program outcomes via the Patient-Family Satisfaction Survey, tracking and addressing quality assurance and adherence issues, and recording and maintaining program expenditures for equipment and supplies.

ELS Protocol
The protocol describes interventions used by the ELS and volunteers. Each are described.

- Daily Visitor Program.
  Intervention Criteria- All patients are enrolled.
  Description- Orienting communication by writing the names of the care team members and daily schedule on the room board.

- Therapeutic Activities Program.
  Intervention Criteria- All patients are enrolled.
  Description- Cognitive stimulation activities three times daily.

- Sleep Enhancement Program.
  Intervention Criteria- Patients who have difficulty falling asleep or sleep poorly at home or in the hospital.
  Description- Nonpharmacologic sleep protocol includes a warm drink at bedtime, relaxation recordings or music, back or hand massage. Unit-wide noise reduction strategies. Adjust medication and nursing interventions to reduce sleep interruptions.

- Early Mobilization Program.
  Intervention Criteria- All patients are enrolled. ELS consults with the ELNS and hospital staff daily to determine the appropriate mobilization program for each patient.
  Description- Ambulation or range-of-motion exercises three times daily, minimizing use of immobilizing equipment.

- Vision Protocol.
  Intervention Criteria- Patients are enrolled if near vision in both eyes <20/70 on near vision screener.
  Description- Visual aids provided (glasses or magnifying lenses) and adaptive equipment is provided (fluorescent tape on call bell and telephone) with daily reinforcement of use.

- Hearing Protocol.
  Intervention Criteria- Patients are enrolled if they hear <3 whispers from each ear on the Whisper Test or are unable to hear fingers lightly rubbed together 3-4 inches from their ear on the Finger Rub Test.
  Description- Portable amplifying devices are provided for those without working hearing aids, daily reinforcement of use. Consider referral for cerumen removal or address with ELNS.

- Feeding Assistance.
  Intervention Criteria- Patients who rate their appetite as "poor" are enrolled. Level of feeding assistance is determined by physical and cognitive impairment.
  Description- Feeding assistance and encouragement provided during meals.

- Fluid Repletion.
  Intervention Criteria- As directed by ELNS, patients with clinical evidence of dehydration and or BUN/Cr ration >18.
  Description- Early recognition of dehydration and encouragement or oral fluid intake.

- Chaplaincy Protocol.
  Intervention Criteria- All patients are eligible for enrollment.
  Description- Encourage patients to express their feelings through spiritual guidance.

When are the ELS Protocols used?
Daily, or as needed following the care plan.

ELS Forms and Documentation
There are three forms used by the ELS to perform documentation. Each will be described.

- **ELS & Volunteer Intervention Worksheet-** The ELS uses this form to specify appropriate protocols for each patient. The form includes lists each of the protocols, allows for documentation of patient scoring on each of the evaluations, describes who implements each protocol, specifies what components of each protocol should be implemented. The ELS and volunteers use this form to guide their implementation.
- **The Volunteer Assignment form** is used by the ELS to make specific task assignments, the volunteer uses this form to document their interventions. If a task is not completed, documentation must be completed describing why interventions not complete.
- **The Volunteer Interventions Master Tracking Log** is used by the ELS to document which tasks are completed on each day.

When is it used?
Daily for each patient with each volunteer, ELS, and ELNS.

How is it used?
To assign patients to volunteers or ELS. To track which specific interventions were assigned.

Appendix

ELS Overview & Responsibilities page #
https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART003_001/123

ELS Protocols page #
https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART003_002/124

ELS and Volunteer Intervention Worksheet page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_001/ELS_Intervention_Worksheet.pdf

ELS and Volunteer Assignments page #
https://help.agscocare.org/fulltext/null/H00103/H00103_PART023_001/135

SECTION 6: Volunteers

What does the volunteer do?
Volunteers play a pivotal role in the CoCare program. Volunteers are used for all patients receiving CoCare, when assigned by the ELNS/ELS, as needed. Volunteers carry out specific, assigned interventions at the bedside with enrolled patients. The volunteer role is unique in that they provide patient contact, sympathetic support, encouragement, and companionship to older adults and their families. Volunteers implement the daily visitor program, the feeding assistance program, the early mobilization program, and the therapeutic activities program.

Volunteer Training
The Volunteer Training document is comprehensive and includes a comprehensive classroom training program that includes case studies, small group discussion, competency-based checklists, and training videos. Following classroom training each volunteer is paired with an experienced volunteer or a CoCare staff member to observe then perform the protocols. Each volunteer is required to demonstrate proficiency carrying out the interventions for each program, verified with competency-based checklists. Classroom training is 16 hours in length with a detailed schedule and materials provided. The ELS serves as the primary volunteer coordinator, recruiter, and trainer. Competency checklists for each task are provided within the appendices. In addition, the ELS supervises all Volunteers.

Volunteers are expected to be reliable, observe limitations, display good judgement, respect confidentiality and HIPAA laws, respect, be enthusiastic and active listeners, pay attention to personal appearance, avoid the use of tobacco, alcohol, or drugs while on duty, and above all be caring.

Volunteer Programs
There are four program components the Volunteers carry out. Each will be described in detail and how the volunteers enact them with patients.

Daily Visitor Program
The primary goal of the Daily Visitor Program is to prevent confusion from developing. Patients commonly become disoriented and confused while hospitalized due to illness, an unfamiliar environment, and new medications.

Orienting communication is used to help prevent communication. Elements of orienting communication incorporates specific, useful information into conversation. Successful orienting communication includes direct eye contact, frequent use of touch, correcting vision and hearing problems, hearing and reflecting the patient's concerns, answering questions, or referring questions to appropriate staff members, and reinforcing the patient's sense of control. The volunteer should make sure their badge is visible, wash hands prior to entering the room. Upon entering the room introduce yourself and call the patient by their name. Be sure the patient has their glasses and hearing aids. Create a quiet environment by closing the door, pull up a chair and sit at eye level. Speak slowly in a firm, medium-loud, low-pitched voice. Be friendly, calm, and self-assured. Communication should be concrete and specific.

Creating an orienting environment can be accomplished by posting cards and drawings, arranging flowers or gifts, referring to personal items as a tool for discussion and orientation, or making a list of items from home that the patient would like and communicating this to the

family. The volunteer should assist with practical matters such as assisting them to fill out their menu, turning the TV on, off, up, or down, assist patient to obtain the newspaper, and assist the patient to make phone calls.

The volunteer should address the patient's concerns and provide emotional support as well as serve as a patient advocate. Acknowledge the patient's feelings and seek answers from the medical staff when appropriate. Verify that each patient has writing materials at the bedside to record any questions. A vital role of the volunteer is to update the orientation board daily. The following information should be on the board and updated with any changes: day of the week, month, date, year, name of doctor, name of nurse and aide, name of volunteer, mealtimes, next volunteer name and time they are expected, tests or procedures scheduled, and other planned activities.

When closing the session with the patient, the volunteer should review any questions or concerns with the patient, inform them what you will do about their questions, tell the patient when to expect the next volunteer, say good-bye. Open the door. Ensure the call light is within reach and the bed is in the lowest position. Wash your hands.

Therapeutic Activities Program
Therapeutic activities are meant to maintain and stimulate cognitive and social function as well as physical and mental relaxation. All patients are eligible for this program. Chosen activities should be geared towards the patient's reported leisure activities and interests when possible. Activities vary based on what the hospital system has available.

- **Sensory stimulation-** take a walk off the unit, elder trivia
- **Trivia-** "Finish the phrase" cards, elder trivia
- **Current Events-** newspapers, news magazines, discuss today's news show
- **Reminiscence-** "How Things Have Changed" cards, photo cards/ pictures, magazines
- **Music-** classical music, music from different eras, environmental sounds
- **Cards-** Uno, rummy, double solitaire
- **Board Games-** checkers, trivial pursuit
- **Puzzles-** crosswords, finger puzzles, jigsaw puzzles, logic puzzles, search words
- **Arts and Crafts-** needlework, drawing
- **Reading-** books, magazines, short stories
- **Video-** classic movies
- **Hand Care-** therapeutic hand massage
- **Spiritual-** provide spiritual resources, spiritual/ religious music per patient preference
- **Special Events-** dog visits, musicians, visiting artists

Feeding Assistance Program
Nutritional screening is performed upon enrollment. The ELS, ELNS, and hospital staff observe patient for signs of inadequate oral intake, physical impairment, and cognitive impairment that impact nutritional status. The ELS and ELNS will determine the appropriate level of feeding assistance: encouragement, set-up meal tray, partial feeding assistance, or full feeding assistance. The ELS oversees the volunteers providing feeding assistance for two meals daily. The volunteer will assist patients to make meal selections based on their ordered diet and personal preferences.

Early Mobilization Program
This program is designed to prevent the complications of prolonged bedrest and to prevent functional decline in hospitalized older adults. For patients able to walk, the program provides walking assistance three times daily. For those who cannot walk, active range of motion coaching is provided three times daily.

Principles of body mechanics are important when assisting patients with mobility. Volunteers never lift or physically move patients. If a patient requires physical assistance to move from one place to another, the hospital staff must provide this assistance. Body mechanics involve using the right muscles and positioning to complete a task. A good standing posture involves feet flat on the floor, separated about 12", arms at the sides, back straight, and abdominal muscles tightened.

Basic rules include taking time to assume proper posture before assisting a patient, keep your back straight, move feet apart to provide a wide base of support, bend from the hips and knees not the waist. Hold heavy objects close to the body. Avoid twisting your trunk or at the knees, pivot the torso as a unit. Always ask for help if needed.

Forms and Documentation
Documentation of all interventions is required of volunteers.

-**Volunteer Assignment Form**- Volunteers receive one assignment form for every patient they are assigned to visit. The forms indicate the specific interventions they are assigned to complete with each patient. Interventions not completed require an explanation, which the volunteers provide on the assignment form.

At the end of each volunteer shift, the volunteer returns the completed forms to the Elder Life Specialist. The completed Volunteer Assignment Forms are then reviewed by the Elder Life Specialist, who uses them to track completion of the volunteer interventions.

-**ELS and Volunteer Intervention Worksheet-** Completed by the ELS to designate specific interventions for the patient. The volunteer uses this as a reference to understand their duties and role within each intervention

-Competency Forms- Competency forms are provided for each of the programs: Daily Visitor, Therapeutic Activities, Feeding Assistance, and Early Mobilization. These are completed prior to the volunteer working independently with patients to ensure they understand the program completely and can enact it safely.

Appendix

Early Mobilization Program page #
https://help.agscocare.org/fulltext/null/H00103/H00103_PART018/128

Volunteer Training page #
https://help.agscocare.org/content/products/H00106/H00106_PART001_001/AGSCoCareHELP_VolunteerTraining.pdf

Competency- Early Mobilization page #
https://help.agscocare.org/content/products/H00104/H00104_PART001_010/Early%20Mobilization_Checklists.pdf

Competency- Daily Visitor page #
https://help.agscocare.org/content/products/H00104/H00104_PART001_010/DailyVisitor_Checklists.pdf

Competency- Feeding Assistance page #
https://help.agscocare.org/content/products/H00104/H00104_PART001_010/FeedingAssistance_Checklists.pdf

Competency- Therapeutic Activities page #
https://help.agscocare.org/content/products/H00104/H00104_PART001_010/Therapeutic%20Activities_Checklists.pdf

Volunteer Interventions Master Tracking Log page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_002/Volunteer%20Tracking%20Log.pdf

Volunteer Assignment Form page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_001/Volunteer_Assignment_Form.pdf

ELS and Volunteer Intervention Worksheet page #
https://help.agscocare.org/content/products/H00103/H00103_PART023_001/ELS_Intervention_Worksheet.pdf

ELS and Volunteer Assignments page #
https://help.agscocare.org/fulltext/null/H00103/H00103_PART023_001/135

Section 7: Patient Packet

What is the Patient Information Packet used for?
A packet is printed, and describes the CoCare program protocols that are implemented within the program for patients. The program is designed to improve the hospital experience of older patients. Implemented by a team of geriatric experts and a team of volunteers. The program can help to offset some of the disruptions in normal routines that occur while being hospitalized. The program promotes mind and body activities despite the presence of illness to facilitate recovery. Protocols include the daily visitor program, feeding assistance program, early mobilization program, therapeutic activities program, and a sleep enhancement program.

Who uses the Patient Information Packet?
The ELS/ELNS provide the packet to patients that meet enrollment criteria for the program to facilitate understanding of the CoCare program.

When is the Patient Information Packet used?
When introducing the program and enrolling patients into the program.

Appendices

Section 8: Finance

Overview
CoCare experts provide an AGS CoCare Financial Worksheet and guidance on program staffing.

The financial worksheet it used to enter data regarding the hospital system and the CoCare program to determine if metrics are changing. Necessary information includes the # of staffed beds, occupancy rates, average length of stay, and salary information for positions within CoCare. Based on entered information, the excel spreadsheet can calculate the expected number of patients eligible for the program, FTE cost and anticipated number of work hours based on the patient load, target number of volunteers, cost per patient case, anticipated delirium prevention percentages, as well as volunteer cost effectiveness.

When is the financial worksheet used?
At program startup, quarterly to track metrics and as needed.

How is the financial worksheet used?
The worksheet is in excel format with formulas to calculate metrics.

FTEs recommended for each team member.

- Elder Life Specialist (ELS) 1.0 FTE
- Elder Life Nurse Specialist (ELNS) 0.5 FTE
- Geriatrician 0.1 FTE
- Program Director 0.1 FTE

Appendices
1AGS CoCare Financial Worksheet page #
https://help.agscocare.org/fulltext/HELP%20Financial%20Worksheets/H00102/H00102_PART004_003/106

Program Staffing page #
https://help.agscocare.org/fulltext/chapter/H00102/H00102_PART005_001/185

SECTION 9: Epic Charting

The following is a Smart phrase to be built into Epic for use by the ELS/ ELNS.

CoCare Smart phrase

Key: *to be filled in for each individual patient
( ) are drop down menus that need to be populated within the smart phrase.

Hospital Elder Life Program
"Preventing Delirium and Functional Decline During Hospitalization"

*has been screened and enrolled in the **Hospital Elder Life Program (CoCare)** on *date. They will begin to receive in person, telephonic, or virtual interventions carried out by specially trained volunteers and the Elder Life Specialist that will **help prevent delirium and functional decline** during their hospital admission.

* is at increased risk of hospital acquired delirium and/or functional decline because of:

- Cognitive impairment as evidenced by the Short Portable Mental Status Exam, attention tasks, or the B-CAM; interventions such as (orientation, therapeutic activities) will be implemented.
- Mobility impairment as evidenced by self-report from the patient and/ or patient care companion. The early mobilization protocol will be implemented to include (ROM exercises, walking with assistance with approval from primary RN and appropriate device (gait belt, cane, front wheel walker).
- Vision impairment as evidenced by (patient report, need for glasses or other visual aids, difficulty seeing properly). Interventions such as (large print text, lighted magnifying glass provided, visual cues with bright tape on call light and phone, ensuring patient is wearing their prescribed glasses) will be implemented.
- Hearing impairment as evidenced by the whisper test. Interventions such as (ensuring patient is wearing their hearing aids, provided pocket talker hearing amplifier and headphones, speaking slowly and clearly, referral for cerumen disimpaction) will be implemented.
- Dehydration/ poor appetite as evidenced by BUN/Creatinine ration of *** or RN report. Interventions such as (fluid repletion protocol, encouragement of oral intake, feeding assistance and encouragement) will be implemented.
- Sleep impairment as self-reported by the patient and/ or patient care companion. Interventions such as (provide a warm drink, calm music, hand massage, noise, and light reduction) will be implemented.

We appreciate your support of the Hospital Elder Life Program and look forward to enhancing your patient's stay. Should you have any questions or concerns please contact our Elder Life Specialist *** at *** or our Elder Life Nurse Specialist *** at ***.

SECTION 10: Satisfaction

Patient & Family Satisfaction Survey TBD

Who uses it?
The CoCare team and management.

What is it used for?
To evaluate patient and family satisfaction after receiving CoCare interventions.

When is it used?
At the conclusion of a hospital admission after receiving CoCare interventions.

Where is it used?
At the site of implementation, via mail, or via electronic survey.

How is it used?
To evaluate program satisfaction, as a metric for improvement.

Asks the following questions:

- Were the visitors helpful during hospitalization? If yes, what was the most helpful? If no, what was the least helpful?
- Were the volunteers helpful with
  Friendly visiting & activities?
  Answering questions?
  Assisting you with meals or trays?
  Assisting you with exercising or walking?
- Overall, was your room quiet and comfortable for sleeping?
- Are there other ways the volunteers and program staff could improve the care of the patients in the hospital?
- Any additional comments?
- Who completed this form? Patient or family member

Appendix
Patient & Family Satisfaction page #
https://help.aqscocare.org/fulltext/null/H00103/H00103_PART023_004/139

SECTION 11: Audits

SECTION 12: Fliers

Who uses it?
The CoCare team.

What is it used for?
Templates that can be used to update the health system on program or pilot implementation, to provide quarterly updates to the team, the unit, and the health system on progress and metrics of the program.

When is it used?
At pilot initiation and quarterly for updates.

Where is it used?
At the site of implementation, via email, via Insite, or on the system website.

How is it used?
To inform of CoCare progress. Each flier is a template that will need to be updated and modified.

Volume 1 | Issue 1
Date

"Doing what a family member would do."

Help us welcome our new CoCare HELP clinical team!

Geriatrician

Iris Boettcher MD will serve as the geriatrician and medical director of CoCare HELP.

Dr. Boettcher is board-certified in internal medicine and hospice and palliative care with an added qualification in geriatric medicine. She earned her medical degree from University of Iowa and completed her internal medicine residency at Butterworth Hospital. She completed her fellowship in geriatric medicine at State University of New York- Buffalo. She has vast experience in the field of geriatrics with special interests in home-based care and advance directives. Her expertise and experience will guide the team in improving care for our geriatric inpatients.

Elder Life Nurse Specialist (ELNS)

*** will serve as the ELNS for CoCare HELP. This position requires a master's degree in nursing or social work. The ELNS functions as the central clinical leader for the team, performs geriatric clinical assessments and nursing interventions, coordinates multi-disciplinary rounds, educates staff, patients, and families, and initiates necessary referrals.

Iris Boettcher, MD

CoCare HELP Newsletter

Volume 1 Issue 2

*** Date

Inclusion Criteria

Age >70 years old and able to communicate verbally or in writing.

At least one of the following risk factors for decline:

Cognitive impairment

Sleep deprivation

Immobility

Vision impairment

Hearing impairment

Dehydration

Referral

EPIC referral:
Ref to HELP

CoCare HELP Team

*** Geriatrician
*** ELNS
*** ELS
*** # of volunteers

CoCare HELP Quarterly Update

The first quarter of implementing CoCare HELP on *** unit (s) was very successful. The team was able to serve *** patients utilizing *** volunteers. A fruitful partnership between Spectrum Health and Grand Valley State University was created to train pre-health students as volunteers to give them valuable experience and care for the vulnerable elderly population. Quarterly updates will be provided, tracking the following metrics over time.

Quarter 1 Metrics- *** date- *** date

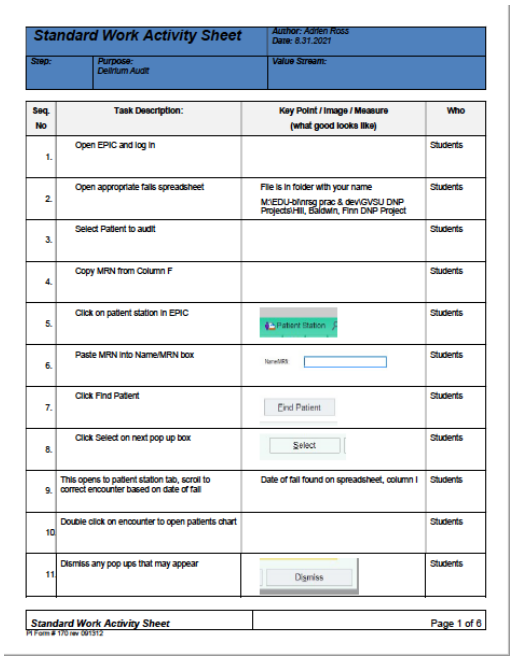
Metric	Initial metric	Current metric
*** patients enrolled		
*** units employing CoCare HELP		
*** individual interventions employed		
*** delirium protocol implemented		
*** dementia protocol implemented		
*** psychoactive protocol implemented		
*** sleep enhancement protocols		
*** early mobilization protocols		
*** hearing protocols implemented		
*** daily visitor program protocols		
*** therapeutic activities protocols		
***feeding assistance protocols		
*** active volunteers		
*** positive patient or family comments		

SECTION 13: Summary

CoCare has the potential to prevent delirium and reduce functional decline for our older adult population in the hospital. This toolkit is meant to serve as a guide for implementation and includes the pertinent documents needed to start and sustain the program. We hope that you find this useful as a quick reference at the training or implementation site.

Please reference the website at https://help.agscocare.org/ for additional documents and training videos.

Appendix 2. b-CAM Standard of Work



Standard Work Activity Sheet

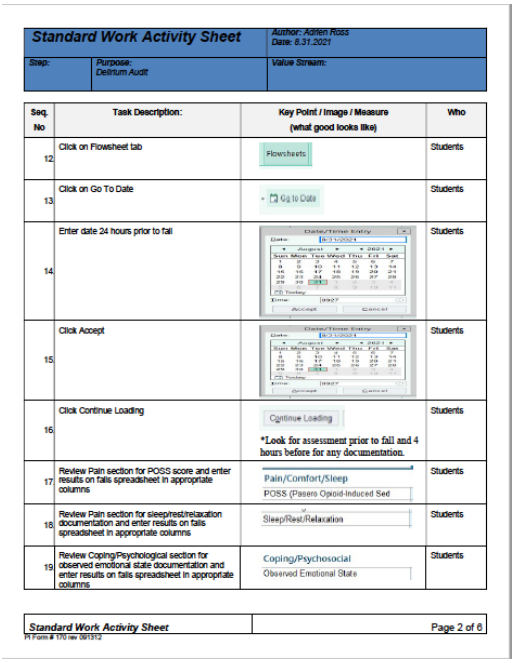
Author: Adrien Ross
Date: 8.31.2021

Step: | Purpose: Delirium Audit | Value Stream:

Seq. No	Task Description:	Key Point / Image / Measure (what good looks like)	Who
1.	Open EPIC and log in		Students
2.	Open appropriate falls spreadsheet	File is in folder with your name M:\EDU-blinrsg prac & dev\GVSU DNP Projects\Hill, Baldwin, Finn DNP Project	Students
3.	Select Patient to audit		Students
4.	Copy MRN from Column F		Students
5.	Click on patient station in EPIC	Patient Station	Students
6.	Paste MRN into Name/MRN box	Name/MRN	Students
7.	Click Find Patient	Find Patient	Students
8.	Click Select on next pop up box	Select	Students
9.	This opens to patient station tab, scroll to correct encounter based on date of fall	Date of fall found on spreadsheet, column I	Students
10.	Double click on encounter to open patients chart		Students
11.	Dismiss any pop ups that may appear	Dismiss	Students

Standard Work Activity Sheet | Page 1 of 6

Pt Form # 170 rev 091312



Standard Work Activity Sheet

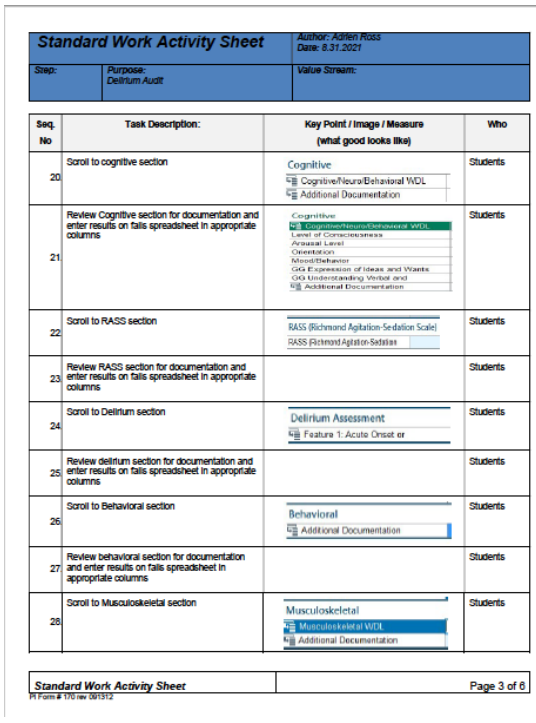
Author: Adrien Ross
Date: 8.31.2021

Step: | Purpose: Delirium Audit | Value Stream:

Seq. No	Task Description:	Key Point / Image / Measure (what good looks like)	Who
12	Click on Flowsheet tab	Flowsheets	Students
13	Click on Go To Date	Go to Date	Students
14	Enter date 24 hours prior to fall	Date/Time Entry	Students
15	Click Accept	Date/Time Entry	Students
16	Click Continue Loading	Continue Loading *Look for assessment prior to fall and 4 hours before for any documentation.	Students
17	Review Pain section for POSS score and enter results on falls spreadsheet in appropriate columns	Pain/Comfort/Sleep POSS (Pasero Opioid-Induced Sed	Students
18	Review Pain section for sleep/rest/relaxation documentation and enter results on falls spreadsheet in appropriate columns	Sleep/Rest/Relaxation	Students
19	Review Coping/Psychological section for observed emotional state documentation and enter results on falls spreadsheet in appropriate columns	Coping/Psychosocial Observed Emotional State	Students

Standard Work Activity Sheet | Page 2 of 6

Pt Form # 170 rev 091312



Standard Work Activity Sheet

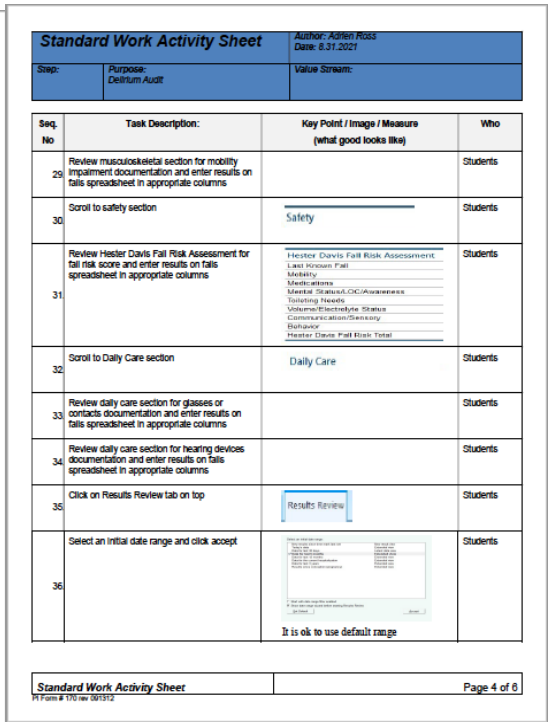
Author: Adrien Ross
Date: 8.31.2021

Step: | Purpose: Delirium Audit | Value Stream:

Seq. No	Task Description:	Key Point / Image / Measure (what good looks like)	Who
20	Scroll to cognitive section	Cognitive Cognitive/Neuro/Behavioral WDL Additional Documentation	Students
21	Review Cognitive section for documentation and enter results on falls spreadsheet in appropriate columns	Cognitive Cognitive/Neuro/Behavioral WDL Level of Consciousness Arousal Level Orientation Mood/Behavior GG Expression of Ideas and Wants GG Understanding Verbal and Additional Documentation	Students
22	Scroll to RASS section	RASS (Richmond Agitation-Sedation Scale) RASS (Richmond Agitation-Sedation	Students
23	Review RASS section for documentation and enter results on falls spreadsheet in appropriate columns		Students
24	Scroll to Delirium section	Delirium Assessment Feature 1: Acute Onset or	Students
25	Review delirium section for documentation and enter results on falls spreadsheet in appropriate columns		Students
26	Scroll to Behavioral section	Behavioral Additional Documentation	Students
27	Review behavioral section for documentation and enter results on falls spreadsheet in appropriate columns		Students
28	Scroll to Musculoskeletal section	Musculoskeletal Musculoskeletal WDL Additional Documentation	Students

Standard Work Activity Sheet | Page 3 of 6

Pt Form # 170 rev 091312



Standard Work Activity Sheet

Author: Adrien Ross
Date: 8.31.2021

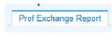
Step: | Purpose: Delirium Audit | Value Stream:

Seq. No	Task Description:	Key Point / Image / Measure (what good looks like)	Who
29	Review musculoskeletal section for mobility impairment documentation and enter results on falls spreadsheet in appropriate columns		Students
30	Scroll to safety section	Safety	Students
31	Review Hester Davis Fall Risk Assessment for fall risk score and enter results on falls spreadsheet in appropriate columns	Hester Davis Fall Risk Assessment Last Known Fall Mobility Medications Mental Status/LOC/Awareness Toileting Needs Volume/Electrolyte Status Communication/Sensory Behavior Hester Davis Fall Risk Total	Students
32	Scroll to Daily Care section	Daily Care	Students
33	Review daily care section for glasses or contacts documentation and enter results on falls spreadsheet in appropriate columns		Students
34	Review daily care section for hearing devices documentation and enter results on falls spreadsheet in appropriate columns		Students
35	Click on Results Review tab on top	Results Review	Students
36	Select an initial date range and click accept	It is ok to use default range	Students

Standard Work Activity Sheet | Page 4 of 6

Pt Form # 170 rev 091312

Standard Work Activity Sheet		Author: Adrien Ross Date: 8.31.2021
Step:	Purpose: Delirium Audit	Value Stream:

Seq. No	Task Description:	Key Point / Image / Measure (what good looks like)	Who
37	Scroll left until date of fall is found		Students
38	Review labs for BUN/Creatinine and enter results on falls spreadsheet in appropriate columns	-Use closest one prior to fall BUN Creatinine	Students
39	Click on Notes on top		Students
40	Click on H&P		Students
41	Review H&P for delirium diagnosis and document on falls spreadsheet in appropriate column		Students
42	Click on Progress Notes		Students
43	Scroll to progress notes prior to fall		Students
44	Click on appropriate progress note		Students
45	Review for delirium diagnosis and document on falls spreadsheet in appropriate column		Students
46	Click on Summary on Top		Students
47	Click on Prof Exchange Report		Students

Standard Work Activity Sheet		Author: Adrien Ross Date: 8.31.2021
Step:	Purpose: Delirium Audit	Value Stream:

Seq. No	Task Description:	Key Point / Image / Measure (what good looks like)	Who
48	Review Current Hospital Problem List and Non-Hospital Problem list for delirium diagnosis and document on falls spreadsheet in appropriate column	 	Students
49	Based on data collected determine if Delirium is present. Document on falls spreadsheet in appropriate column	1 = Yes 0 = No	Students
50	Document total time audit took on falls spreadsheet in appropriate column		Students
51	Repeat steps 3-50 for all assigned patients		Students

Appendix 3. Age-Friendly Health Systems Course Calendar

COURSE CALENDAR Key: Lessons (L), Reading (R), Activity (A)				
Week	**Topics**	**Prior to Class**	**In-the-Classroom**	**After Class Assignment #**
1	Course Introduction Aging & Age Friendly Health Systems; 4Ms	Read syllabi (R) Review compliance document needs (A) Examine Bb set-up (A)	1. Introduction: review syllabi, course expectations, and Bb: Rubrics (L) 2. Lecture: Background on Healthcare, The Triple Aims, the National Academy of Medicine (L) 3. Lecture: Common Conditions when Aging (L) 4. Lecture: Health Systems for older adults (L) 5. Lecture: The Age Friendly Health Systems (L) 6. Lecture: The 4M's (L) 7. Activity: Review compliance document needs (A) 8. Guest Speaker: Geriatrician (L)	**A1** Complete Quiz Bb (A) **A2** Submit Compliance documents Bb (A)
2	Factors influencing social, emotional, physical, and cognitive decline when aging	1. View IHI Triple Aims presentation (A) 2. View presentation on aging (A) 3. View presentation on aging-in-place (A)	1. Lecture: Factors influencing social decline (L) 2. Lecture: Factors influencing emotional decline (L) 3. Lecture: Factors influencing physical decline (L) 4. Lecture: Factors influencing cognitive decline (L) 5. Lecture: Cognitive Impairment, Dementia and Alzheimer's Disease (L) 6. Lecture: Preventing Delirium- CoCare Module (L) 7. Activity: Group discussion on aging factors (A) 8. Guest Speaker: Elder Life Nurse Specialist (L)	**A3** Complete Quiz Bb (A)
3	Strategies to prevent social, emotional, physical, and cognitive decline when aging	1. View presentation on CoCare HELP intervention (A) 2. Read (R) Infographics (Socialization; Physical Activity; Depression)	1. Lecture: Age Friendly Care for the Older Adult (L) 2. Lecture: Role of CoCare HELP Team (L) 3. Lecture: Protocol on therapeutic activities (L) 4. Lecture: Protocol on feeding assistance (L) 5. Lecture: Protocol on early mobilization (L) 6. Lecture: Protocol on daily visiting/orientation (L) 7. Lecture: Protocol on hearing (L) 8. Lecture: Protocol on eyesight (L) 9. Lecture: Protocol on delirium (L) 10. Lecture: Protocol on dementia (L) 11. Lecture: Protocol on what matters most (L) 12. Guest Speaker: Elder Life Nurse Specialist (L)	**A4** Complete Quiz Bb (A)
4	Enacting strategies social, emotional, physical, and cognitive decline	1. View presentation on CoCare HELP intervention (A) 2. Read (R) Infographics (Dementia; Nutrition) Bb	1. Lecture: Volunteer Training CoCare Module (L) 2. Complete Competency Checklist Observation (A) 3. Role Play: Protocol on therapeutic activities (A) 4. Role Play: Protocol on feeding assistance (A) 5. Role Play: Protocol on early mobilization (A) 6. Role Play: Protocol on daily visiting/orientation/what matters most (A) 7. Guest Speaker: Volunteer Coordinator (L) 8. Guest Speakers: Physical, Occupational, Recreational Therapist (L)	**A5** Complete Quiz Bb (A)
5	Simulation Lab: strategies to prevent decline	View presentation on CoCare HELP intervention (A)	1. Simulation: Protocol on therapeutic activities (A) 2. Simulation: Protocol on feeding assistance (A) 3. Simulation: Protocol on early mobilization (A) 4. Simulation: Protocol on daily visiting/orientation/on what matters most (A) 5. Complete Competency Checklist: Hands-On (A)	**A6** Submit Competency Checklist Bb (A)
6	Lecture and Placement Visit: Orientation, scheduling, dress code,	View Site Online Training: Site Onboarding (A)	1. Lecture: Site Orientation, Scheduling, Logging Hours (L). 2. Discussion: Site Training: safety, HIPAA, confidentiality, Protected Health Information, Reporting Concerns, Protecting Sensitive Data, Fire Safety, Blood Borne Pathogens, Safe Work Practices, Emergency Preparedness, Active Shooter, Slip Trip, Fall Prevention, COVID (A) 3. Guest Speaker: Elder Life Nurse Specialist on Role of the Volunteer (L) 4. Lecture: Dress Code (L) 5. Site Visit and Unit Orientation: Elder Life Nurse Specialist (A)	**A7** Complete Quiz Bb (A)
7	Placement		Complete Placement: 6 to 8-hours (A)	**A8** Submit Log Bb (A)
8	Placement		Complete Placement: 6 to 8-hours (A)	**A9** Submit Log Bb (A)
9	Placement		Complete Placement: 6 to 8-hours (A)	**A10** Submit Log Bb (A)
10	Placement		Complete Placement: 6 to 8-hours (A)	**A11** Submit Log Bb (A)
11	Placement		Complete Placement: 6 to 8-hours (A)	**A12** Submit Log Bb (A)
12	Placement		Complete Placement: 6 to 8-hours (A)	**A13** Submit Log Bb (A)
13	Placement		Complete Placement: 6 to 8-hours (A)	**A14** Submit Log Bb (A)
14	Placement		Complete Placement: 6 to 8-hours (A)	**A14** Submit Log Bb (A)
	Final Exam		Complete Essay (A)	**A15** Submit Essay Bb (A)

Appendix 4. Age-Friendly Health Systems Course Rubrics

Rubric: Compliance

Note: These are the required site compliance documents. All documents must be submitted to do the placement in the hospital to protect you, the staff, and the patients and their family members.

Criteria	Did not Submit Complete Documentation of Compliance	Submitted Complete Documentation of Compliance
TB blood draw (IGRA)	**0-69%; 0-points** (0% of total grade)	**0-69%; 0-points** (0% of total grade)
MMR/Varicella Vaccination or Titer	**0-69%; 0-points** (0% of total grade)	**0-69%; 0-points** (0% of total grade)
TDAP Vaccination	**0-69%; 0-points** (0% of total grade)	**0-69%; 0-points** (0% of total grade)
COVID Vaccination	**0-69%; 0-points** (0% of total grade)	**0-69%; 0-points** (0% of total grade)
Influenza Vaccination	**0-69%; 0-points** (0% of total grade)	**0-69%; 0-points** (0% of total grade)
Criminal background check Form	**0-69%; 0-points** (0% of total grade)	**0-69%; 0-points** (0% of total grade)
Social Security Number	**0-69%; 0-points** (0% of total grade)	**0-69%; 0-points** (0% of total grade)
Seven compliance documents submitted	**0-69%; 0-points** (0% of total grade)	**90-100% 100-points** (10% of total grade)

Rubric: Simulation Lab

Criteria	Did not Attempt Competency	Attempt Competency, Completed Incorrectly	Attempt Competency, Completed Correctly
Daily Visitor	Did not wash hands, have badge visible, knock and introduce self or close door for privacy. Did not ensure glasses and hearing aides were in and call light is within reach, nor was tray table is close/appropriate height, water-cup filled, arrange cards on shelf; nor update orientation board. **0-69%; 0-points** (0% of total grade)	Entered room after washing hands with badge visible, knocked and introduces self; closed door for privacy, did not ensure glasses and hearing aides were in and call light is within reach, nor was tray table is close/appropriate height, water-cup filled, arrange cards on shelf; nor update orientation board. **70-80%; 5-points** (.5% of total grade)	Entered room after washing hands with badge visible, knocked and introduces self; closed door for privacy, ensured glasses and hearing aides were in and call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf; updated orientation board. **81-100% 10-points** (1% of total grade)
Therapeutic Activities	Did not ensure glasses and hearing aides were in; nor read a headline in the newspaper or use trivia materials to do one question. **0-69%; 0-points** (0% of total grade)	Ensured glasses and hearing aides are in; but did not read a headline in the newspaper nor use trivia materials to do one question. **70-80%; 5-points** (.5% of total grade)	Ensured glasses and hearing aides are in; read a headline in the newspaper and listened, and used trivia materials to do one question. **81-100% 10-points** (1% of total grade)
Early Mobility	Did not walk, clear obstacles, lower head of bed to lay flat, do ROM, assist to sitting position on	Walked with non-skid footwear on, cleared obstacles, lowered head of bed to lay flat, did ROM,	Walked with non-skid footwear on, cleared obstacles, lowered head of bed to lay flat, did ROM,

	edge of bed, place on gait belt, have walker is in front of patient, ensure patient standing fully upright, assessed balance before walking, assist with walking (hold gait belt) to door and back to bed. **0-69%; 0-points** (0% of total grade)	assist to sitting position on edge of bed, placed gait belt on, ensured walker is in front of patient, ensured patient standing fully upright, assessed balance before walking, assist with walking (holding gait belt) to door and back to bed. Did not lower to floor when starting to fall nor call RN. **70-80%; 15-points** (1.5% of total grade)	assist to sitting position on edge of bed, placed gait belt on, ensured walker is in front of patient, ensured patient standing fully upright, assessed balance before walking, assist with walking (holding gait belt) to door and back to bed. When patient started to fall, protect head, bent at the waist while lowering to the floor, called RN into room. **81-100% 30-points** (3% of total grade)
Feeding Assistance Protocol	Did not assist with menu, sit upright (if needed), adjust tray table, drape napkin across chest, offer ½ spoonful at a time, offer frequent liquids, nor give two bites/one sip of water, nor assist with wiping hands/mouth when completed. **0-69%; 0-points** (0% of total grade)	Assisted with menu options and order, but did not sit upright (if needed), adjust tray table, drape napkin across chest, offer ½ spoonful at a time, offer frequent liquids, nor give two bites/one sip of water, nor assist with wiping hands/mouth when completed. **70-80%; 15-points** (1.5% of total grade)	Assisted with menu options and order, sat upright (if needed), adjust tray table, draped napkin across chest, offered ½ spoonful at a time, offered frequent liquids, gave two bites/one sip of water, assisted with wiping hands/mouth when completed. **81-100% 30-points** (3% of total grade)
Effective communication and interpersonal skills	Did not pull up chair to sit at bedside, communicate clearly, review schedule with patient, listen to how they are doing, nor made eye contact. **0-69%; 0-points** (0% of total grade)	Pulled up chair to sit at bedside, communicated clearly, reviewed schedule with patient but did not listen to patient and how they are doing or made eye contact. **70-80%; 10-points** (1% of total grade)	Pulled up chair to sit at bedside, communicated clearly, reviewed schedule with patient, listened to patient and how they are doing, and made eye contact. **81-100% 20-points** (2% of total grade)

Rubric: Log

Criteria	Did not Meet Expectation	Partially Met Expectation	Met Expectation
	0-69%; 0-points (0% of total grade)	**70-80%; 10-points** (1% of total grade)	**81-100% 25-points** (2.5% of total grade)
Complete	Completed <21 hours of practicum.	Completed 21 to 42 hours of practicum.	Completed ≥42-hours of practicum.

Note: 25-points.

Rubric: Placement Evaluation and Final Log

Criteria	Did not Enact	Attempt Enactment, Completed Incorrectly	Enacted Correctly

Daily Visitor	Did not wash hands, have badge visible, knock and introduce self or close door for privacy. Did not ensure glasses and hearing aides were in and call light is within reach, nor was tray table is close/appropriate height, water-cup filled, arrange cards on shelf; nor update orientation board. **0-69%; 0-points** (0% of total grade)	Entered room after washing hands with badge visible, knocked and introduces self; closed door for privacy, did not ensure glasses and hearing aides were in and call light is within reach, nor was tray table is close/appropriate height, water-cup filled, arrange cards on shelf; nor update orientation board. **70-80%; 30-points** (3% of total grade)	Entered room after washing hands with badge visible, knocked and introduces self; closed door for privacy, ensured glasses and hearing aides were in and call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf; updated orientation board. **81-100% 55-points** (5.5% of total grade)
Therapeutic Activities	Did not ensure glasses and hearing aides were in; nor read a headline in the newspaper or use trivia materials to do one question. **0-69%; 0-points** (0% of total grade)	Ensured glasses and hearing aides are in; but did not read a headline in the newspaper nor use trivia materials to do one question. **70-80%; 30-points** (3% of total grade)	Ensured glasses and hearing aides are in; read a headline in the newspaper and listened, and used trivia materials to do one question. **81-100% 55-points** (5.5% of total grade)
Early Mobility	Did not walk, clear obstacles, lower head of bed to lay flat, do ROM, assist to sitting position on edge of bed, place on gait belt, have walker is in front of patient, ensure patient standing fully upright, assessed balance before walking, assist with walking (hold gait belt) to door and back to bed. **0-69%; 0-points** (0% of total grade)	Walked with non-skid footwear on, cleared obstacles, lowered head of bed to lay flat, did ROM, assist to sitting position on edge of bed, placed gait belt on, ensured walker is in front of patient, ensured patient standing fully upright, assessed balance before walking, assist with walking (holding gait belt) to door and back to bed. Did not lower to floor when starting to fall nor call RN. **70-80%; 30-points** (3% of total grade)	Walked with non-skid footwear on, cleared obstacles, lowered head of bed to lay flat, did ROM, assist to sitting position on edge of bed, placed gait belt on, ensured walker is in front of patient, ensured patient standing fully upright, assessed balance before walking, assist with walking (holding gait belt) to door and back to bed. When patient started to fall, protect head, bent at the waist while lowering to the floor, called RN into room. **81-100% 55-points** (5.5% of total grade)
Feeding Assistance Protocol	Did not assist with menu, sit upright (if needed), adjust tray table, drape napkin across chest, offer ½ spoonful at a time, offer frequent liquids, nor give two bites/one sip of water, nor assist with wiping hands/mouth when completed. **0-69%; 0-points**	Assisted with menu options and order, but did not sit upright (if needed), adjust tray table, drape napkin across chest, offer ½ spoonful at a time, offer frequent liquids, nor give two bites/one sip of water, nor assist with wiping hands/mouth when completed.	Assisted with menu options and order, sat upright (if needed), adjust tray table, draped napkin across chest, offered ½ spoonful at a time, offered frequent liquids, gave two bites/one sip of water, assisted with wiping hands/mouth when completed. **81-100% 55-points**

	(0% of total grade)	**70-80%; 30-points** (3% of total grade)	(5.5% of total grade)
Effective communication and interpersonal skills	Did not pull up chair to sit at bedside, communicate clearly, review schedule with patient, listen to how they are doing, nor made eye contact. **0-69%; 0-points** (0% of total grade)	Pulled up chair to sit at bedside, communicated clearly, reviewed schedule with patient but did not listen to patient and how they are doing or made eye contact. **70-80%; 30-points** (3% of total grade)	Pulled up chair to sit at bedside, communicated clearly, reviewed schedule with patient, listened to patient and how they are doing, and made eye contact. **81-100% 55-points** (5.5% of total grade)
Completed Log	Completed <24 hours of practicum. **0-69%; 0-points** (0% of total grade)	Completed 24 to 48 hours of practicum. **70-80%; 10-points** (1% of total grade)	Completed ≥48-hours of practicum. **81-100% 25-points** (2.5% of total grade)

Note: 25-points for Final Log 275-points for Evaluation.

Rubric Final Exam

Criteria	**Did not Meet Expectation**	**Partially Met Expectation**	**Met Expectation**
Ethics	No examples of 4M's from practicum provided. **0-69%; 0-points** (0% of total grade)	Provided an example of 2 of the 4M's from practicum. **70-80%; 25-points** (2.5% of total grade)	Provided an example of 4M's from practicum. **81-100%; 50 points** (5% of total grade)
Civic Dimensions	Did not discuss patient that impacted most during practicum nor why. **0-69%; 0-points** (0% of total grade)	Discussed patient that impacted most during practicum but not why. **70-80%; 12.5-points** (1.25% of total grade)	Discussed patient that impacted most during practicum and why. **81-100%; 25 points** (2.5% of total grade)
Professional	No discussion on impact of practicum on career choice. **0-69%; 0-points** (0% of total grade)	Incomplete discussion on impact of practicum on career choice. **70-80%; 12.5-points** (1.25% of total grade)	Discussed impact of practicum on career choice. **81-100%; 25 points** (2.5% of total grade)

Appendix 5. Age-Friendly Health Systems Course Quizzes

A1 Quiz

Note: This Quiz is related to the content in Week 1 in the course. There are 10 Questions on the quiz and each question is worth 2.5 points.

1. QUESTION: Pick the one correct answer (multiple choice): What does it mean to be an Age-Friendly Health System?
    a. To care about all people, age is just a number.
    b. To align care with what matters to the older adult.
    c. To help individuals age and be happy.
    d. To assess how to eat a proper diet.

ANSWER: **B** To align care with What Matters to the older adult.

2. QUESTION: Pick the one correct answer (multiple choice): What are the 4M's?
    a. Maintaining relationships with family, friends, and others.
    b. Care that addresses the persons mental health.
    c. Modifying the home setting to address mobility problems.
    d. What matters most, mobility, mentation, and medications.

ANSWER: **D** What Matters most, Mobility, Mentation, and Medications.

3. QUESTION: True or False: There are 10 common conditions when people age.
ANSWER: **True.** There are 10 common conditions when people age.

4. QUESTION: True or False: Older adults do not experience very many conditions as they age.
ANSWER: **False.** Most older adults experience conditions as they age, due to the aging process.

5. QUESTION: Pick the one correct answer (multiple choice): Why is mobility important to older adults?
    a. To ensure that the older adult can go jogging.
    b. To ensure that the older adult moves safely every day to maintain function and do What Matters".
    c. To ensure that the older adult can ride a bike.
    d. To ensure that the older adult can mountain climb.

ANSWER: **B** To ensure that the older adult moves safely every day to maintain function and do What Matters".

6. QUESTION: Pick the one correct answer (multiple choice): Why is "What Matters Most" important to older adults?
    a. To know what type of house they want to live in.
    b. To know what their favorite color is.
    c. To know and align care with each older adult's specific health outcome goals and care preferences, including, but not limited to, end-of-life care, and across settings of care".
    d. To know who their family members are.

ANSWER: **C** To know and align care with each older adult's specific health outcome goals and care preferences, including, but not limited to, end-of-life care, and across settings of care".

7. QUESTION: True or False: Health care in the US is confusing and sometimes difficult to access.
ANSWER: **True.** Health care in the US is confusing and sometimes difficult to access.

8. QUESTION: Pick the one incorrect answer (multiple choice): What are the Triple Aims in Health Care?

a. Improving the patient experience of care.
b. Reducing how many people go to the hospital.
c. Improving the health of populations.
d. Reducing the per capita cost of health care.

ANSWER: **B** Reducing how many people go to the hospital.

9. QUESTION: True or False: Aging is the process of growing old: "the external signs of aging".
ANSWER: **True.** Aging is the process of growing old: "the external signs of aging".

10. QUESTION: Pick the one correct answer (multiple choice): What is an older adult?
a. 40 or older
b. 50 or older.
c. 60 or older.
d. 70 or older.

ANSWER: **C** 50 or older.

A3 Quiz

This Quiz is related to the content in Week 2 in the course. There are 10 Questions on the quiz and each question is worth 2.5 points.

1. QUESTION: Pick the one correct answer (multiple choice): What does delirium look like (signs & symptoms)?
a. Difficulty paying attention or confusion about daily events or routines.
b. Not recognizing familiar people.
c. Sleepiness (more than usual) or irritability or anger.
d. Seeing or hearing things that are not there or feeling that someone is trying to hurt them.
e. All of the above.

ANSWER: **E** All of the above. There are many signs and symptoms of delirium.

2. QUESTION: True or False: Cognitive decline is a normal part of aging.
ANSWER: **True.** Cognitive decline is a normal part of aging.

3. QUESTION: True or False: Delirium is a serious problem that can delay a patient's recovery from surgery or lengthen a hospital stay.
ANSWER: **True.** Delirium is a serious problem that can delay a patient's recovery from surgery or lengthen a hospital stay.

4. QUESTION: Dementia is the loss of thinking, remembering, and reasoning and occurs often in older adults.
ANSWER: **True.** Dementia is the loss of thinking, remembering, and reasoning and occurs often in older adults.

5. QUESTION: Pick the one correct answer (multiple choice): What are the stages of Dementia?
a. Mild Stage is where a person experiences a loss of energy and spontaneity (unplanned or without thought), yet no one notices anything unusual.
b. Moderate Stage is where a person eventually begins to be disabled (any condition of body or mind that makes it more difficult to do activities to live).
c. Severe Stage is the final stage and the person becomes more and more unresponsive.

d. All of the above.

ANSWER: **D** All of the above, Mild, Moderate and Severe.

6. QUESTION: Depression is sadness that is more than normal, lasts at least two weeks, and greatly affects your daily life.
ANSWER: **True.** Depression is sadness that is more than normal, lasts at least two weeks, and greatly affects your daily life.

7. QUESTION: True or False: A fall is a common occurrence in older adults who are in the hospital.
ANSWER: **True.** Older adults often fall when in the hospital.

8. QUESTION: Pick the one incorrect answer (multiple choice): What are the factors that can cause negative emotions leading to emotional decline in older adults?

a. Chronic medical conditions.
b. Loss of loved ones or isolation.
c. Inability to do activities they once enjoyed.
d. Limited financial resources.
e. All of the above.

ANSWER: **E** All of the above, there are many causes of emotional decline in older adults.

9. QUESTION: True or False: In the hospital, the most common cause of a fall is transferring (i.e., from bed to chair, chair to toilet).
ANSWER: **True.** In the hospital, the most common cause of a fall is transferring (i.e., from bed to chair, chair to toilet).
10. QUESTION: True or False: Consistent socialization reduces the likelihood that older adults will experience the depression caused by isolation and loneliness.
ANSWER: **True.** Consistent socialization reduces the likelihood that older adults will experience the depression caused by isolation and loneliness.

A4 Quiz

This Quiz is related to the content in Week 3 in the course. There are 10 Questions on the quiz and each question is worth 2.5 points.

1. QUESTION: Pick the one correct answer (multiple choice): What is a Health System for older adults?

a. One that has physical and occupational therapists.
b. One that understands aging is a series of processes that include direct damage, accumulation of cellular waste, errors, and imperfect repairs as well as the responses to them.
c. One that helps individuals age and be happy.
d. One that assesses how to eat a proper diet.

ANSWER: **B** One that understands aging is a series of processes that include direct damage, accumulation of cellular waste, errors, and imperfect repairs as well as the responses to them.

2. QUESTION: Pick the one correct answer (multiple choice): What is "Volunteers" role regarding mobility?

a. Assist the patient get out of bed or go from the bed to the wheelchair, if needed.
b. Assist the patient to walk, if needed.
c. Push the wheelchair, if needed.

d. Assist the patient get back into bed or out of the wheelchair to the bed, if needed.
e. All of the above.

ANSWER: **E** All of the above.

3. QUESTION: True or False: Volunteers receive instructions from the Elder Life Specialist (ELS) who is a RN or the bedside nurse regarding the mobility for each patient.
ANSWER: **True.** Volunteers receive instructions from the Elder Life Specialist (ELS) who is a RN or the bedside nurse regarding the mobility for each patient. Volunteers do not assist a patient unless directed by an RN.

4. QUESTION: True or False: The Daily Visitor Programs helps keep patients from getting confused and keeping them "oriented".
ANSWER: **True.** Orientating a patient is keeping the patient knowing: them self, the place they are at, the time, and the situation.

5. QUESTION: Pick the one correct answer (multiple choice): If you feel a patient begin to fall, the best thing to do is which of the following? Keep your back straight and feet shoulder width apart.
a. Hold the patient under the arms or around the waist and get close to the patient as quickly as possible.
b. Ease the patient to the floor, protecting the head.
c. Stay with the patient and call for help.
d. Do not move the patient until they have been checked by the nurse.
e. All of the above.

ANSWER: **E** All of the above.

6. QUESTION: True or False: The goal of the Feeding Assistance Program is to maintain the older person's nutritional status throughout hospitalization.
ANSWER: **True.** The goal of the Feeding Assistance Program is to maintain the older person's nutritional status throughout hospitalization.

7. QUESTION: True or False: The primary goal of the Daily Visitor Program is to prevent confusion from developing.
ANSWER: **True.** The primary goal of the Daily Visitor Program is to prevent confusion from developing.

8. QUESTION: Pick the one correct answer (multiple choice): What is the "Volunteers" role regarding feeding assistance?
1. Assist the patient fill out their menu, if needed.
2. Assist the patient to prepare to eat, put on glasses, war oxygen, sit upright, adjust tray table to comfortable height, provide a napkin, and remove unappetizing objects if needed.
3. Prepare the meal tray, remove the cover, open straws, butter bread and cut into small pieces, provide the napkin and glasses, and ask if needs assistance.
4. Encourage the patient to eat, make eye contact, stay with the patient, keep the focus on eating, if needed.
5. All of the above.

ANSWER: **E** All of the above.

9. QUESTION: True or False: The goal of the Therapeutic Activities Program is the provide recreational or leisure activities that provide a balance to refresh the spirit and regain the energy spent on the "work" of treatment and recovery.
ANSWER: **True.** The goal of the Therapeutic Activities Program is the provide recreational or leisure activities that provide a balance to refresh the spirit and regain the energy spent on the "work" of treatment and recovery.

10. QUESTION: Pick the one correct answer (multiple choice): What is the "Volunteers" role regarding "Therapeutic Activities"?
    a. Engage each patient is his or her assigned activity for at least 10 minutes.
    b. Record observations on the Volunteer Assignment Sheet.
    c. To present the activity enthusiastically and encourage the patient to participate.
    d. Offer them every opportunity to show you how to perform the activity.
    e. All of the above.

ANSWER: **E** All of the above.

A5 Quiz

This Quiz is related to the content in Week 4 in the course. There are 10 Questions on the quiz and each question is worth 2.5 points.

1. QUESTION: Pick the one correct answer (multiple choice): You have been working with Mrs. S., who has just been taken off to x-ray for a test. Her roommate says to you, "She seems so sad; I really wish I could help her! What should you as a "Volunteer" do?
    a. Tell Mrs. S. she is not sad and do not discuss it again.
    b. Ask Mrs. S. if she feels sad, listen to her, and report to the Elder Life Specialist (ELS) or bedside RN that Mrs. S. feels sad.
    c. Tell the roommate to mind her own business.

ANSWER: **B** Ask Mrs. S. if she feels sad, listen to her, and report to the Elder Life Specialist (ELS) or bedside RN that Mrs. S. feels sad.

2. QUESTION: Pick the one correct answer (multiple choice): Mr. F tells you that the nurse's aide does not like him, ignores his requests and he is upset, but he tries to get you to promise "not to tell". What should you as a "Volunteer" do?
    a. Listen to Mr. F's concerns.
    b. Do not make a promise to "not tell".
    c. Explain to Mr. F. that it is important to let the Elder Life Specialist (ELS) or bedside RN know about his concerns so he can receive care as needed.
    d. All of the above.

ANSWER: **D** All of the above, listen, make no promises, and explain you will tell the ELS or RN.

3. QUESTION: Pick the one correct answer (multiple choice): Mrs. B is scheduled to have a test called an EEG. She tells you she does not want to have it because she "does not want anyone fooling around with her brain." How do you as a "Volunteer" respond?
    a. Tell Mrs. B. you would want anyone messing with your brain either.
    b. Do not respond to the comment from Mrs. B.
    c. Do not report the comment to the Elder Life Specialist (ELS) or bedside RN.
    d. None of the above.

ANSWER: **D** None of the above, you should listen, tell her that you will talk with the ELS or beside RN about her concern.

4. QUESTION: Pick the one correct answer (multiple choice): You have just finished a Daily Visit to a patient. Her roommate calls out to you: "Could you please help me with my menu, and get me a cup of coffee?" How do you as a "Volunteer" respond?
    a. Explain that you are only able to assist her roommate.
    b. Explain that you will go the front desk, and ask her Nurse Tech to help her.
    c. Report back to the roommate that someone will come help her soon.
    d. All of the above.

ANSWER: **D** All of the above. You as a "Volunteer" are only able to assist those patients the Elder Life Specialist (ELS) has assigned you to help.

5. QUESTION: Pick the one correct answer (multiple choice): You have been talking to Mr. B for 30 minutes. He seems to be getting anxious, tugging at the bed sheets. Then, he looks over to the corner of the room and says, "That dog over there has been staring at me all morning". You look in the corner of the room, and his roommate's tan coat is draped on a suitcase. What do you as a "Volunteer" do?
    a. Pick up and hold the tan coat and show it to the patient.
    e. While holding up the tan coat, state this is your roommates coat.
    f. Tell the Elder Life Specialist (ELS) or bedside RN that Mr. B. thought the coat was a dog.
    b. All of the above.

ANSWER: **D** All of the above. Pick up the coat, state it is a coat belonging to the roommate, and report occurrence to the ELS or bedside RN.

6. QUESTION: You have come in to walk Mr. F. He says, "I am so thirsty, absolutely parched. Could you please get me a drink of water?" What do you as a "Volunteer" do?
    a. Check to make sure that Mr. F. can have some water.
    g. If Mr. F. can have the water, obtain a glass of water and provide it to him.
    h. Document that Mr. F. drank the water.
    b. All of the above.

ANSWER: **D** All of the above. Check to make sure he can have water, provide the water and document.

7. QUESTION: True or False: You are assigned to walk with Mrs. S. She tells you she does not feel well enough to walk today and needs to stay in bed. You as a "Volunteer" talk to the Elder Life Specialist (ELS) or bedside RN to find out if Mrs. S. should stay in bed or you should try to get her to walk.
ANSWER: **True.** The primary goal of the Mobility Program is to help maintain mobility while hospitalized.

8. QUESTION: True or False: Mr. J has not been eating very well. You learn that he is used to very spicy and hot food. You as a "Volunteer" tell Mr. J. he can select different foods on his menu, and assist him to complete the form, and report to the Elder Life Specialist (ELS) or bedside RN why Mr. J. has not been eating very well.
ANSWER: **True.** You explain to Mr. J. he can select the types of foods he desires on the menu and assist him to complete the form, and report to the Elder Life Specialist (ELS) or bedside RN why Mr. J. has not been eating very well.

9. QUESTION: True or False: You come to transport Mrs. W to a Therapeutic Activities Group. She says she does not want to "play any bingo-type games with those old folks". You as a "Volunteer" ask Mrs. W. what activities she would like to do, and do those activities if feasible.

ANSWER: **True.** Sometimes patients prefer to do activities that are of interest to them, and these should be done when possible, to keep the older adult engaged.

10. QUESTION: True or False: You are ending your Reminiscence activity with Mr. B. He tells you he has been very depressed since the death of his wife. He thinks he may be drinking too much, but he does not want anyone to know that. You as a "Volunteer" listen to him, and report to the Elder Life Specialist (ELS) or bedside RN to determine what to do.
ANSWER: **True.** When you are concerned about a patient, like Mr. B. you talk with the Elder Life Specialist (ELS) or bedside RN to determine what actions you as a "Volunteer" should take.

Appendix 6. Age-Friendly Health Systems Course Exam Essay

Instructions for Final Exam Essay. Please write a 500 to 750 Word Essay on the following topics (100-points).

Topic	Points (%)
An example of each of the 4M's that you encountered during your practicum. (Ethical responsibility to align with the Age Friendly Health System.)	50% of Paper
The patient (s) that impacted you the most during the practicum and why. (Civic dimensions.)	25% of Paper
How this practicum impacted your future career choice. (Professional.)	25% of Paper

Appendix 7. Age-Friendly Health Systems Course Syllabi

Grand Valley State University

Course Syllabi: Age Friendly Health Systems

Course Description This course will lay a foundation for community service within an Age Friendly Health System 4M's: What Matters Most? Medication Usage? Mentation? Mobility? Students will explore factors that affect social, emotional, physical, and cognitive decline, examine strategies to prevent decline, then enact strategies with older adults in an experiential placement.
Semester Hours/Credits: 2 **Prerequisites:** None **Teaching Method**: In-person

Course Objectives:
1. Define an Age Friendly Health Systems and the 4Ms, and gain an appreciation for why it is needed.
2. Identify the common risk factors for what matters most to the patient, medication use, cognitive decline, and mobility in older adults.
3. Explain the social, emotional, physical, cognitive, and financial impact of care that is not age friendly-older adults.
4. Describe the protocol on therapeutic activities, feeding assistance, early mobilization, hearing, eyesight, orientation, daily visiting, delirium, dementia, and what matters most.
5. Demonstrate competency in enacting the protocol for therapeutic activities, feeding assistance, early mobilization, hearing, eyesight, orientation, daily visiting, delirium, dementia, and what matters most.
6. Apply the protocol on therapeutic activities, feeding assistance, early mobilization, hearing, eyesight, orientation, daily visiting, delirium, dementia, and what matters most with older adults in an Age Friendly Health System.

Expected Student Learning Outcomes:
1. Explain how complementary and competing perspectives contribute to the ongoing discussion about health.
2. Collaboration: work together and share the workload equitably to progress toward shared objectives learned through structured activities that occur over a significant period of time. Students will: (a) Use knowledge of group dynamics to select appropriate roles. (b) Use knowledge of group management to create effective plans. (c) Successfully follow the group's plan. (d) Assess their contribution and the contribution of others.
3. Integration: synthesize and apply knowledge, experiences, and multiple perspectives to new, complex situations. Students will: (a) Connect academic theories with personal experiences to illuminate both. (b) Draw conclusions connecting examples, facts, and/or theories from more than one field of study. (c) Generalize skills, abilities, theories, or methodologies for solving problems in new contexts.
4. Problem Solving: design and evaluate strategies to answer open-ended questions. Students will: (a) Construct clear and insightful problem statements that prioritize relevant contextual factors. (b) Identify multiple approaches for solving the problem within the given context. (c) Design and fully explain solutions that demonstrate comprehension of the problem. (d) Evaluate the feasibility of solutions considering the context and impact of potential solutions (e.g., historical, ethical, legal, practical).

Faculty: Name:
Office: Phone: Email:
Office Hours:

Required Textbooks:
Age Friendly Health System: Guide to Using the 4Ms in the Care of Older Adults (2020). An initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement in partnership with the American Hospital Association and the Catholic Health Association of the United States. From: http://www.ihi.org/Engage/Initiatives/Age-Friendly-Health-Systems/Documents/IHIAgeFriendlyHealthSystems_GuidetoUsing4MsCare.pdf
Note: CoCare HELP online modules: Provided in Blackboard
Required Readings: Provided in Blackboard.

Assignments, Points Assigned for Assignments, and Due Dates*

#	Evaluation Method	Topics	Points	Date Due*
A1	Quiz	Age Friendly Health Systems and the 4M's	25	#/#/####
A2	Submission	Compliance: Submission of required items	100	#/#/####
A3	Quiz	Factors influencing social, emotional, physical, cognitive decline	25	#/#/####
A4	Quiz	Strategies to prevent social, emotional, physical, cognitive decline	25	#/#/####
A5	Quiz	Enacting strategies social, emotional, physical, cognitive decline	25	#/#/####
A6	Simulation Lab	Competency Check-List	100	#/#/####
A7	Quiz	Site Orientation, Onboarding, and Site Visit	25	#/#/####
A8	Log	Placement Hours	25	#/#/####
A9	Log	Placement Hours	25	#/#/####
A10	Log	Placement Hours	25	#/#/####
A11	Log	Placement Hours	25	#/#/####
A12	Log	Placement Hours	25	#/#/####
A13	Log	Placement Hours	25	#/#/####
A14	Log	Placement Hours	25	#/#/####
A15	Log & Evaluation	Placement Hours and Evaluation	300	#/#/####
A16		Final Exam: Essay	100	#/#/####
		Total Points	**1000**	

*Instructions and Rubrics for Assignments are located in Bb.

Required Practicum Dress Code, Training, and Compliance: Students must complete these requirements and dress code in order to conduct placement within a health system.

- *Dress Code requirement:* White top; black pants; and closed toe shoes (no sandals).
- *Training requirements:* Online modules; face-to-face orientation on safety, customer service/relations, commitment, and re-enforcement of the concepts on-line; and "unit specific" once integrated into practicum.
- *Compliance requirements:*
  - TB blood draw (IGRA)
  - MMR/Varicella (proof of immunity/titers), TDAP, COVID, Influenza Vaccinations
  - Criminal background check
  - Provision of Social Security Number

ESSENTIAL COURSE INFORMATION

Course Grading and Grading Scale: The total points possible for the course grade = 1,000.
Based on the KCON grading policy, individual/cumulative scores will NOT be rounded up.
KCON Grading Scale will be used to determine letter grades as follows:

93-100	A	73-76	C
90-92	A-	69-72	C-
87-89	B+	65-68	D+
83-86	B	61-64	D
80-82	B-	57-60	D-
77-79	C+	<57	E

Syllabi Changes: If changes are made an announcement will be made on Blackboard (Bb).

Course Requirements and Expectations of Students:

1. Complete the content expectations for the class and/or make alternative arrangements.
2. Attend assigned practicum experiences.
    a. A minimum of 48 practicum log hours must be completed to pass the course.
    b. Non-attendance or no show at a practicum, do not count toward of log hours.
3. Participate actively in Bb assigned activities and assignments.
4. Access to the GVSU Bb is required. Students are responsible for all documents, assignments, and messages posted on Bb and for checking the Bb site frequently.
5. Be responsible and adhere to the GVSU Section 4 Academic Integrity of Grades and Scholarship. Review this information: Section 4 Academic Integrity of Grades and Scholarship 1) Student Academic Grievance Procedure; 2) Academic Integrity; 3) Student Conduct; 4) Equity & Inclusion; and 5) Respect.

Late Assignment Policy Assignments are due to BB at the times posted. For late assignments, 5 points will be deducted each day for 3 days. If the assignment is over 3 days past due, it will not be accepted and be graded as a "0" (unless prior arrangements are made with faculty).

OTHER ESSENTIAL INFORMATION

Faculty-Student Communication A clear faculty-student communication strategy is essential at all times. Faculty and students are expected to communicate between in-class sessions via Bb and email. Please use GVSU assigned emails for all communication. Please designate course number in the subject line of the email. Faculty will respond within 24 hours on weekdays, 72 hours on weekends, unless you are notified that we will not be available. If you do not receive a response, please email a 2nd time.

Plagiarism: Any ideas or material taken from another source for either written or oral presentation must be fully acknowledged. Offering the work of someone else as one's own is plagiarism. The language or ideas taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, speeches or the writings of other students. Any student who fails to give credit for the ideas or materials that have been taken from another is guilty of plagiarism. As defined in the GVSU student code (Appendix A) the penalty may be "failure of a specific assignment, the entire course or if flagrant, dismissal from the University."

Student Conduct: Review the Student Code of Conduct for information on **grievances** and other procedures. Students are also expected to adhere to the standards of the GVSU Student Code, which may be accessed on the GVSU website. This is also the place to review the Student Grievance Procedure of GVSU if necessary.

Special Needs: Any student in this class with special needs because of a learning, physical, or other disability are encouraged to contact the Course coordinator and the Disability Support Resources at 331-2490. Furthermore, if you have a disability and think you will need assistance evacuating this classroom and/or building in an emergency-situation, please inform the Course Coordinator so that the university and she can develop a plan to assist you.

Academic Conduct and Honesty: Academic honesty and integrity are expected of all students. Dishonesty in any form will not be tolerated. If these practices are observed or suspected, appropriate disciplinary action will be implemented. All academic work will be done by the student to whom it is assigned without unauthorized aid of any kind. Academic work is defined as a test, examination, speech, presentation, paper, field or laboratory work

including clinical documentation, or any other academic activity on which a student is evaluated. Refer to the Introduction to the Bachelors of Science in Nursing Program Handbook, page 30.

The principles of truth and honesty are recognized as fundamental to a community of teachers and scholars. The university expects that both faculty and students will honor these principles, and in so doing protect the validity of university grades. This means that all academic work will be done by the student to whom it is assigned without unauthorized aid of any kind. Instructors, for their part, will exercise care in the planning and supervision of academic work, so that honest effort will be positively encouraged. Compliance shall include compliance with the following specific rules:

1. No student shall knowingly, without authorization, procure, provide, or accept any materials which contain questions or answers to any examination or assignment.
2. No student shall, without authorization, complete, in part or in total, any examination or assignment for another person.
3. No student shall, without authorization, allow any examination or assignment to be completed, in part or in total, by another person.
4. No student shall knowingly plagiarize or copy the work of another person and submit it as his or her own.
5. No student shall submit work that has been previously graded or is being submitted concurrently to more than one course without authorization from the instructor(s) of the class(es) to which the student wishes to submit it.

Fire Emergency Evacuation Procedure - "Fire: Immediately proceed to the nearest exit during a fire alarm. Do not use elevators." "More information is available on the University's Emergency website located at http://www.gvsu.edu/emergency"

NETIQUETTE: During any online discussions (including discussion boards or email communications) students are expected to observe the rules of "netiquette." Although our society is becoming used to electronic communication, it is important that we remain aware of how we express our thoughts and foster an environment for others to express their opinions. Here are a few reminders for appropriate communication in the online world:

1. Whenever posting a message to discussion boards, chat rooms, or email, use only language that reflects professional communication.
2. Attacks on other course members via email, discussion boards, chat rooms, and the like are unacceptable.
3. Try to break up any lengthy postings with blank lines or carriage returns and tabs whenever possible.
4. Remember that in e-language, words typed in all CAPs are read as though you are SHOUTING at the person.
5. Use of the course web site for solicitation, promoting of business or products, posting of offensive messages or jokes, and other activities unrelated to the course are prohibited. Likewise, using the email addresses of course participants for unwelcome solicitation messages is also considered misuse of this electronic medium.

GVSU General Education Program The mission of the Grand Valley State University General Education Program is to provide a broad-based liberal education experience that fosters lifelong learning and informed citizenship. The program prepares students for intelligent participation in public dialogues that consider the issues of humane living and responsible action in local, national, and global communities.

LAKER Impression of Faculty Teaching (LIFT) Evaluation: Approximately two weeks before the course ends, you will receive a link in your GVSU student email from LIFT via IASystem Notification inviting you to complete an evaluation related to instructor performance and course delivery. Your response is important to KCON. You will be providing constructive feedback to your faculty to assist them in making changes to continually improve student learning and maintain program quality. Your personal information is never attached to the content of your LIFT response on any record that is accessible to anyone at GVSU, including your instructor. In addition, professors will not see any results from the evaluation until after they have turned in student grades, so it is not possible for the content of the evaluations to influence the grades they give.

Appendix 8. Age-Friendly Health Systems Course Activities (Weeks 1 & 2)

Activity (Week 1)

Review of Required Compliance Documents

Instructions: Please see Syllabi Page 2, where the required vaccinations, checks, and information is listed. We will review each in detail.

Compliance requirements:

1. A TB blood draw (IGRA) is needed to establish that you do not actively have Tuberculosis.
    - Tuberculosis (TB) is **caused by a type of bacterium called Mycobacterium tuberculosis**. It's spread when a person with active TB disease in their lung's coughs or sneezes and someone else inhales the expelled droplets, which contain TB bacteria.
    - TB is very contagious.
2. Vaccinations: it is likely that all four of these vaccinators were already completed for you to be admitted as a student to GVSU. If that is the case, please submit the proof of vaccination in Bb.
    a. MMR/Varicella (proof of immunity/titers) Vaccination.
        - The measles, mumps, rubella, and varicella (MMRV) vaccine is used to help prevent these diseases in children. This vaccine causes your body to develop immunity to the disease. This vaccine will not treat an active infection that has already developed in the body.
    b. TDAP Vaccination.
        - TDAP *vaccine* can prevent tetanus, diphtheria, and pertussis. Diphtheria and pertussis spread from person to person.
    c. COVID Vaccinations.
        - Prevents or diminished effect of COVID.
    d. Influenza Vaccination.
        - Only required in Winter Semester during flu season.
3. Criminal background check: The Site will cover the cos.
4. Provision of Social Security Number: to assure identify.

Notes: If you do not have a title or background check, the Site will cover the costs.

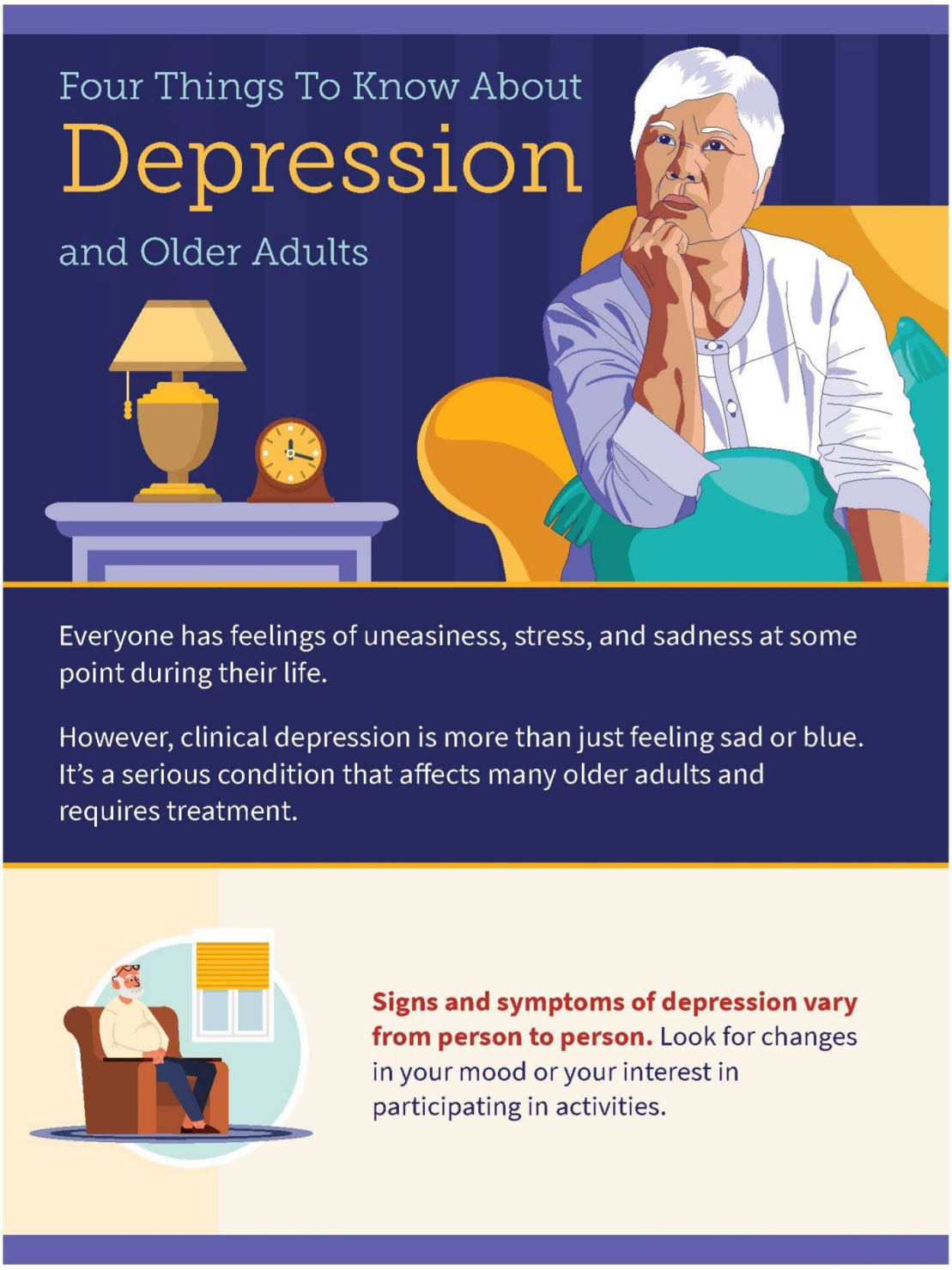
Activity (Week 2)

Group discussion on aging factors

Instructions: This week you reviewed factors impacting aging. We are all aging, but some are older adults. Some aspects of aging are normal and some are not. There are four scenarios for social, emotional, physical, and cognitive decline and we will discuss each.

1. ***Socialization and Aging:*** You are assigned to work with Mr. M in individual bedside activities. You ask him "Are there any particular activities or hobbies that you enjoy? Mr. M responds, "No, all I want to do is sleep". What should you say or do?
2. ***Emotions and Aging:*** You have been working with Mrs. S., who has just been taken off to x-ray for a test. Her roommate says to you, "She seems so sad; I really wish I could help her! What's wrong with her?" What is your response?
3. ***Physical Function and Aging:*** Mr. T has been sitting in the chair for a very long time. He begs you to help him get back into bed, for which he requires much assistance. How should you respond?
4. ***Cognitive Decline and Aging:*** You are ending your Reminiscence activity with Mr. B. He tells you he has been very depressed since the death of his wife. He thinks he may be drinking too much, but he does not want anyone to know that. How do you handle this information?

Appendix 9. Age-Friendly Health Systems Course Readings (Infographics Week 3 & 4)



Depression can be treated. If you have symptoms of depression that last for more than two weeks, talk with your doctor. There are many effective treatment options, so it's important to seek help early on.

Get support from family and friends. Though they cannot provide treatment, loved ones can help someone with depression by listening, watching for symptoms, participating in activities the person enjoys, and encouraging them to seek treatment.

A healthy lifestyle can help feelings of depression. Staying active, eating a healthy diet, getting enough sleep, and connecting with friends and family can benefit your mental health.

Visit **www.nia.nih.gov/health/depression-and-older-adults** for more information about depression and older adults.

NIH National Institute on Aging

Get Fit So You Can Do More!

NIH National Institute on Aging

Exercise and be active every day so you can keep doing what's most important to you.

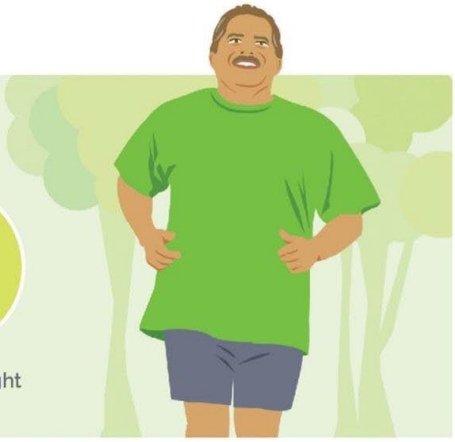
Practice all 4 types of exercise for the most benefits.

1 Endurance

So you can

climb steps

dance the night away

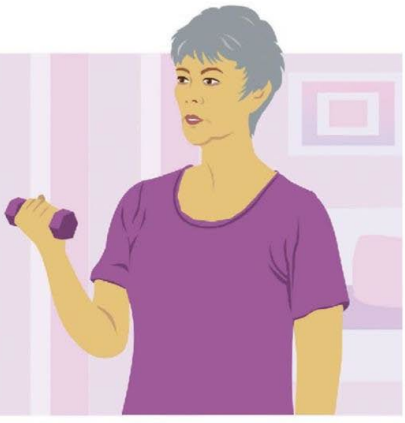


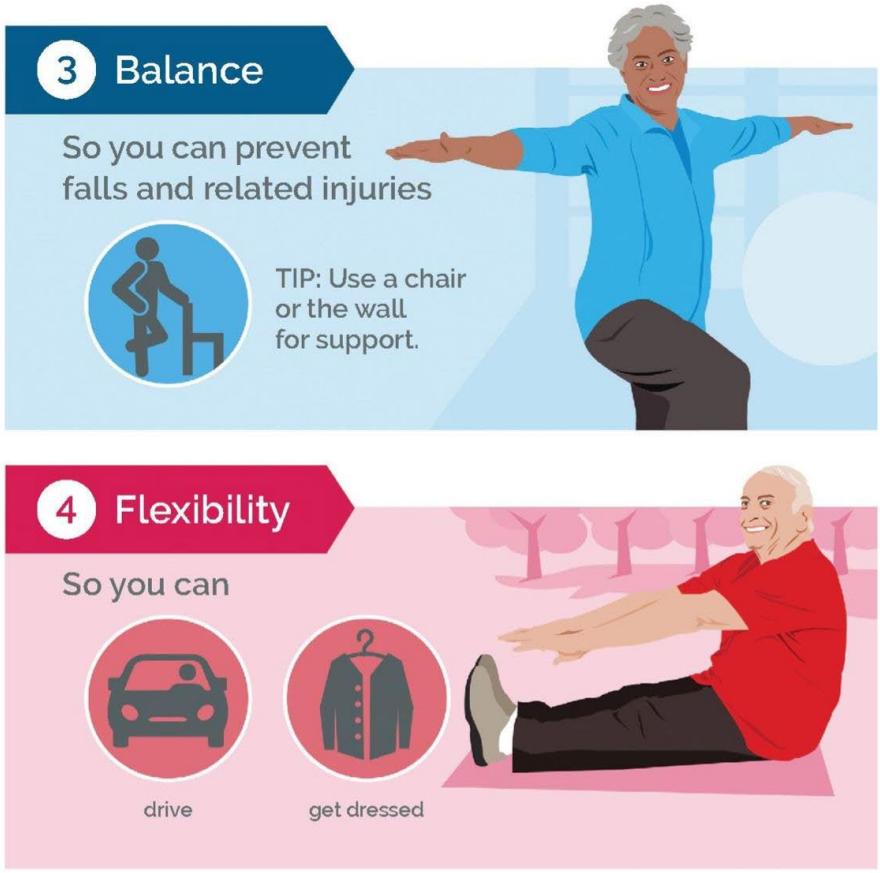
2 Strength

So you can

lift groceries

carry grandchildren

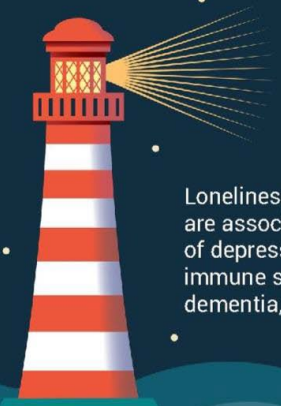




Get exercise ideas, motivational tips, and more from the National Institute on Aging at NIH.

Visit nia.nih.gov/health/exercise

STAY CONNECTED
to Combat Loneliness and Social Isolation



Feeling lonely and being isolated are bad for your health.

Loneliness and social isolation are associated with higher rates of depression, a weakened immune system, heart disease, dementia, and early death.*

Are you at risk?

Try to stay active and better connected if you:

- live alone or can't leave your home
- feel alone or disconnected from others
- recently had a major loss or change
- are a caregiver
- lack a sense of purpose

Ideas for staying connected

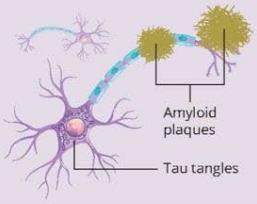
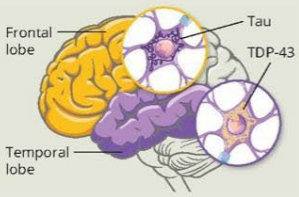
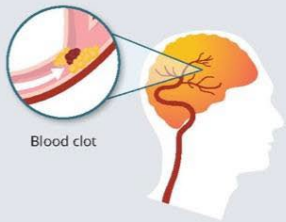
Find an activity that you enjoy or learn something new. You might have fun and meet people with similar interests.


Get moving! Exercise decreases stress, boosts your mood, and increases your energy.
Volunteer. You'll feel better by helping others.
Stay in touch with family, friends, and neighbors in person, online, or by phone.
Consider adopting a pet. Animals can be a source of comfort and may also lower stress and blood pressure.
For more information about preventing loneliness and social isolation, visit
https://www.nia.nih.gov/health/participating-activities-you-enjoy.
NIH National Institute on Aging
*Cacioppo JT, Hawkley LC. Perceived social isolation and cognition. Trends Cogn Sci. 2009;13(10):447-54.

Understanding Different Types of Dementia

As we age, it's normal to lose some neurons in the brain. People living with dementia, however, experience far greater loss. Many neurons stop working, lose connections with other brain cells, and eventually die. At first, symptoms can be mild, but they get worse over time. Read on to learn more about four different types of dementia.

TYPES OF DEMENTIA

Alzheimer's Disease	Frontotemporal Dementia	Lewy Body Dementia	Vascular Dementia
What Is Happening in the Brain?*			
Abnormal deposits of proteins form amyloid plaques and tau tangles throughout the brain. 	Abnormal amounts or forms of tau and TDP-43 proteins accumulate inside neurons in the frontal and temporal lobes. 	Abnormal deposits of the alpha-synuclein protein, called "Lewy bodies," affect the brain's chemical messengers. 	Conditions, such as blood clots, disrupt blood flow in the brain. 
Symptoms			
Mild • Wandering and getting lost • Repeating questions **Moderate** • Problems recognizing friends and family • Impulsive behavior **Severe** • Cannot communicate	**Behavioral and Emotional** • Difficulty planning and organizing • Impulsive behaviors • Emotional flatness or excessive emotions **Movement Problems** • Shaky hands • Problems with balance and walking **Language Problems** • Difficulty making or understanding speech *There are several types of frontotemporal disorders, and symptoms can vary by type.*	**Cognitive Decline** • Inability to concentrate, pay attention, or stay alert • Disorganized or illogical ideas **Movement Problems** • Muscle rigidity • Loss of coordination • Reduced facial expression **Sleep Disorders** • Insomnia • Excessive daytime sleepiness **Visual Hallucinations**	• Forgetting current or past events • Misplacing items • Trouble following instructions or learning new information • Hallucinations or delusions • Poor judgment
Typical Age of Diagnosis			
Mid 60s and above, with some cases in mid-30s to 60s	Between 45 and 64	50 or older	Over 65

These changes are just one piece of a complex puzzle that scientists are studying to understand the underlying causes of these forms of dementia and others.

Diagnosis

Symptoms can be similar among different types of dementia, and some people have more than one form of dementia, which can make an accurate diagnosis difficult. Symptoms can also vary from person to person. Doctors may ask for a medical history, complete a physical exam, and order neurological and laboratory tests to help diagnose dementia.

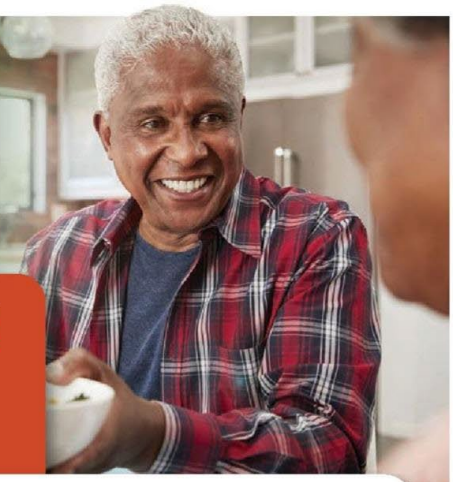
Treatment

There is currently no cure for these types of dementia, but some treatments are available. Speak with your doctor to find out what might work best for you.

Living with dementia can be challenging, but there are ways to manage it. To learn more about these types of dementia and other conditions that can cause dementia, visit **www.nia.nih.gov/health/what-is-dementia**.

NIH National Institute on Aging

Make Smart Food Choices for Healthy Aging



It's never too late to make smarter food choices. Healthy eating is an important part of staying healthy as you age.

Following these tips can help you maintain a healthy weight, get the nutrients you need, and lower your risk of chronic disease.

Try to eat and drink from these food groups each day: fruits, vegetables, grains, protein, and dairy.

Fruits

Vegetables

Grains

Protein

Dairy

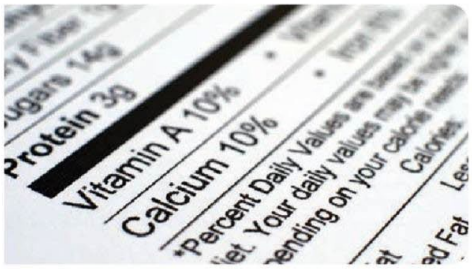
Variety is an important part of eating healthfully!

Instead of:	Try these:
High-calorie snacks	Nutrient-dense snacks
Fruit products with added sugars	Fresh fruit
Regular cola	Water flavored with fruits or vegetables

Cut back on foods and beverages that are high in calories and added sugars, sodium, and saturated fats. Shift to healthier options like fresh fruits and vegetables instead.

Use a food diary to help you keep track of your total daily calories, carbs, protein, etc., and see if you are making healthy choices. Understand how many calories you need based on your level of daily activity.

Choose a variety of foods that are packed with nutrients and low in calories. Check the food labels to understand what foods will meet your nutritional needs each day.



How Many Calories Do You Need Each Day?

Women

Not physically active
1,600 cal.

Moderately active
1,800 cal.

Active lifestyle
2,000-2,200 cal.

Men

Not physically active
2,000-2,200 cal.

Moderately active
2,200-2,400 cal.

Active lifestyle
2,400-2,800 cal.

Visit **www.nia.nih.gov/health/healthy-eating** and **www.choosemyplate.gov** to learn more.

NIH National Institute on Aging

Appendix 10. Age-Friend Health Systems Course Simulation Standardized Patient Training

Discipline Name AHS / NUR *SCENARIO #1*

Case objectives **Prevent Delirium and Cognitive Decline by Addressing the 4Ms**

STANDARDIZED PATIENT TRAINING NOTES TEMPLATE WITH PHYSICAL EXAM

Name Patient **DOB** **Preferred Pronouns**	• Pat Smith (can be male or female) • August 8, 1948 (74 Years Old) • He/Him if male; She/Her if female
Setting	• In-patient in the hospital for a urinary tract infection due to dehydration • Patient is laying down in the hospital bed when student enters the room • There is an orientation board in the room that lists the daily schedule and personal on staff • There is a menu, water and glasses on the bedside table • Many cards sent from family are in a pile on the bedside table • There is a walker and gait belt next to the bed, non-skid foot ware is already present on the patient's feet • The patient some cognitive impairment (this is known due to a previously done cognitive test, however this is more "forgetfulness" rather than completely cognitively impaired). • The patient doesn't remember that it is meal time and need prompting to review the menu for meal options • The patient is unable to feed them self • The patient has not been sleeping well because of all the hospital personal interruptions in the night for lab work and vital signs • The patient has vision impairment and needs glasses to read and see clearly • The patient is hard of hearing and needs hearing aids (these are already in ears) • The patient is able to mobilize but must use a walker due to being unsteady without it • The patient's family visits occasionally but is not in the room at the time the student volunteer comes • The patient enjoys visiting with people and staying up to date on current events going on in the world
Emotional State	• Pleasantly forgetful • Cooperative • Kind • Enjoys visiting

SP Training 1

S.Baker BSN,RN 3/2021 Simulation

Opening Statement	• ***How are you doing today?*** o "Oh, I am well, I have been not feeling so great due to a urinary tract infection but the medicine is starting to help I think because I am feeling more like myself"
Statement Elaboration	***Can I help you put your glasses on?*** o "Yes, that would be great, I forgot I didn't have them on." ***Can I arrange your cards for you?*** o "Yes, thank you" ***How are you doing today?*** o "Oh, I am well, I have been not feeling so great due to a urinary tract infection but the medicine is starting to help I think because I am feeling more like myself" ***Would you like to look at this article I saw in the newspaper?*** o Sure! I love keeping up to date on things going on in the world. *comment on the article ***What would you like to eat for lunch?*** o "My appetite has not been the best, just a yogurt with a glass of juice please" ***Can I help feed you your lunch?*** o "Yes please, that yogurt sounds delicious" ***Would you like to go do some range of motion exercises and go for a walk?*** o "Okay, that's probably a good idea" **Follow instructions as provided during the ROM/walk
Background Story (History of)	• Urinary tract infection • Lives at assisted living home where meals are served and assistance is provided • Utilizes walker at all times at assisted living home • Wears hearing aids and glasses
Social History	• Family is a strong support system; many cards are in the room sent from multiple family members.
Physical Exam Outline	• ***Approach the patient*** Learner enters room after washing hands with badge visible, knocks and introduces themselves Closes door for privacy Ensure glasses and hearing aides are in • ***Orienting environment*** Ensures call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf

	• ***Orientation board*** Updates orientation board with missing items: Name and date • ***One on One time*** Pulls up chair to sit bedside, communicates clearly with reviewing schedule with patient Listens to patient and how they are doing • ***Current events*** Reads a headline in the newspaper and listens actively • ***Menu assist*** Assist patient with opening the menu and reviewing options for lunch that they would like to order • ***Meal environment*** Sit patient upright (if needed) Adjust tray table. Tray is delivered by staff Drape napkin across chest • ***Full meal assist*** Offer ½ spoonful at a time, offer frequent liquids Give two bites/one sip of water *Only two small bites of yogurt and one small sip of juice will be fed! • ***End of meal*** Assist with wiping hands/mouth when completed • ***Prior to mobility*** Ensure walking aid and non-skid footwear are in place Clear obstacles Lower head of bed to lay flat • ***Range of motion*** Complete ROM: arm lifts, arms over and out, arm slides, shoulder roll, elbow bends, palm up and down, wrist bend's, heel slides, hip slides, ankle bends • ***Get out of bed*** Assist to sitting position on the edge of bed, have patient sit for a few minutes prior to moving Pump ankles Place gait belt on, ensure walker is in front of patient, verbal coaching: Lean forward, push on hands, push feet on floor • ***Assist to walk*** Ensure patient is standing fully upright and assess balance before walking. Assist with walking while holding gait belt, follow to one side and never leave *Walk to door and back to bed • ***The falling patient*** *Pretend to fall, please sit in chair rather than fall to the ground When patient starts to fall, keep back straight, feet apart, hold patient underarms, protect head, bend at the waist while lowering to the floor – Call RN into room
Equipment or Moulage	• Bed/Bedding • Bedside table • Meal Tray and Menu

	• Patient Belongings (cards, hearing aids, glasses) • White Board • Fall Risk Sign (on door) • Patient Gown (on patient) • Wheelchair, Walker, Gait belt (at bedside) • Non-skid Socks (on feet) • Trash can • Get-Well Soon Cards (5) • Call light (with patient)
Author **Date** **Revised**	• **Name: Elizabeth Hill** • **Email: hilleg@mail.gvsu.edu** • **Date: 3.6.22** • **Revision date: ****

Discipline Name AHS / NUR ***SCENARIO #2***

Case objectives **Prevent Delirium and Cognitive Decline by Addressing the 4Ms**

STANDARDIZED PATIENT TRAINING NOTES TEMPLATE WITH PHYSICAL EXAM

Name Patient **DOB** **Preferred Pronouns**	• Maxine/Max Nielson (can be male or female) • March 3, 1946 (76 Years Old) • He/Him if male; She/Her if female
Setting	• In-patient in the hospital for community acquired pneumonia. Patient has finished their course of antibiotics and feels much better than when first admitted. • Patient is laying down in the hospital bed when student enters the room • There is an orientation board in the room that lists the daily schedule and personal on staff • There is a menu, water and glasses on the bedside table • Many cards sent from family are in a pile on the bedside table • There is a walker and gait belt next to the bed, non-skid foot ware is not present on the patient's feet • The patient had some confusion upon hospital admission, but has gotten better with the antibiotic treatment, although they sometimes forget they are in the hospital. • The patient forgot that is already lunch time and needs prompting to review the menu for meal options • The patient can feed themselves, but needs help with setting up the tray • The patient has not been sleeping well because of all the hospital personal interruptions in the night for lab work and vital signs • The patient has vision impairment and needs glasses to read and see clearly • The patient is hard of hearing and needs hearing aids (these are already in ears) • The patient is able to mobilize but must use a walker due to being unsteady without it • The patient's family visits occasionally but is not in the room at the time the student volunteer comes • The patient enjoys visiting with people and staying up to date on current events going on in the world

Emotional State	• Slightly lonely because family has not visited today • Cooperative but hesitant • Kind • Enjoys visiting
Opening Statement	• ***How are you doing today?*** ○ "Oh, I am doing much better now that I think this lung infection is gone, but I am so sad that my family has not come to visit me today"
Statement Elaboration	***Can I help you put your glasses on?*** ○ "Yes, that would be great, I forgot I didn't have them on." ***Can I arrange your cards for you?*** ○ "Yes, thank you. My family is so nice to send cards, I just wish they would come visit me in person" ***How are you doing today?*** ○ "Oh, I am doing much better now that I think this lung infection is gone, but I am so sad that my family has not come to visit me today" ***Would you like to look at this article I saw in the newspaper?*** ○ I guess so. Everything just is so sad in the news now days. Is it something happy? *comment on the article ***What would you like to eat for lunch?*** ○ "I forgot it was lunch time, but now that I think about it, I could definitely eat. Is there any soup on that menu?" ***Can I help feed you your lunch?*** ○ "I don't need to be fed, but I could use some help arranging all of these plates and utensils" ***Would you like to go do some range of motion exercises and go for a walk?*** ○ "Yeah, I'd like to. I always enjoy walking but I never want to bother the nurses" **Follow instructions as provided during the ROM/walk
Background Story (History of)	• Community acquired pneumonia • Lives at assisted living home where meals are served, and assistance is provided if needed. • Utilizes walker at all times at assisted living home • Wears hearing aids and glasses
Social History	• Family is a strong support system; many cards are in the room sent from multiple family members. 23 Grandchildren. Husband died 3 years ago from cancer.

Physical Exam Outline	• ***Approach the patient*** Learner enters room after washing hands with badge visible, knocks and introduces themselves Closes door for privacy Ensure glasses on and hearing aides are in • ***Orienting environment*** Ensures call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf • ***Orientation board*** Updates orientation board with missing items: Name and date • ***One on One time*** Pulls up chair to sit bedside, communicates clearly with reviewing schedule with patient Listens to patient and how they are doing • ***Current events*** Reads a headline in the newspaper and listens actively • ***Menu assist*** Assist patient with opening the menu and reviewing options for lunch that they would like to order • ***Meal environment*** Sit patient upright (if needed) Adjust tray table. Tray is delivered by staff Drape napkin across chest • ***Partial meal assist*** Sit patient upright Adjust Tray table as needed for comfort and ease Uncover/unwrap Provide companionship with conversation Do not ask questions during chewing • ***End of meal*** Assist with wiping hands/mouth when completed • ***Get out of bed and into wheelchair*** Ensure non-skid footwear are in place Clear obstacles Place wheelchair at 90-degree angle to the bed, lock brakes, lift footrests, have patient slide to edge of the bed with the feet on the floor, place gait belt on, ensure walker is in front of patient Verbal coaching: lean forward, push on hands, push feet on floor Ensure there are no tubes to connect to wheelchair and feet are on petals of wheelchair Release the brakes, push, re-brake (Go to the door and back) Place wheelchair at 90 degrees to the bed, lock brakes, lift foot rests, ask patient to slide to edge of wheelchair, ensure gait belt is on Verbal coaching: lean forward, push on hands, push feet on floor Pivot to bed

Equipment or Moulage	• Bed/Bedding • Bedside table • Meal Tray and Menu • Patient Belongings (cards, hearing aids, glasses) • White Board • Fall Risk Sign (on door) • Patient Gown (on patient) • Wheelchair, Walker, Gait belt (at bedside) • Non-skid Socks (on feet) • Trash can • Get-Well Soon Cards (5) • Call light (with patient)
Author **Date** **Revised**	• Name: Kara Roman • Email: Nelsonka@mail.gvsu.edu • Date: 3.19.22 • Revision date: **

Discipline Name AHS / NUR ***SCENARIO #3***

Case objectives **Prevent Delirium and Cognitive Decline by Addressing the 4Ms**

STANDARDIZED PATIENT TRAINING NOTES TEMPLATE WITH PHYSICAL EXAM

Name Patient **DOB** **Preferred Pronouns**	• Jack/Jaqueline Jones (can be male or female) • February 18, 1947 (75 Years Old) • He/Him if male; She/Her if female
Setting	• In-patient in the hospital for a CHF exacerbation • Patient is laying down in the hospital bed when student enters the room • There is an orientation board in the room that lists the daily schedule and personal on staff • There is a menu, water and glasses on the bedside table • Many cards sent from family are in a pile on the bedside table • There is a walker and gait belt next to the bed, non-skid foot ware is already present on the patient's feet • The patient some cognitive impairment (this is known due to a previously done cognitive test, however this is more "forgetfulness" rather than completely cognitively impaired). • The patient doesn't remember that it is meal time and need prompting to review the menu for meal options • The patient is unable to feed them self • The patient has not been sleeping well because of all the hospital personal interruptions in the night for lab work and vital signs • The patient has vision impairment and needs glasses to read and see clearly • The patient is hard of hearing and needs hearing aids (these are already in ears) • The patient is able to mobilize but must use a walker due to being unsteady without it • The patient's family visits occasionally but is not in the room at the time the student volunteer comes • The patient enjoys visiting with people and staying up to date on current events going on in the world
Emotional State	• Pleasantly forgetful • Cooperative • Kind • Enjoys visiting

Opening Statement	• ***How are you doing today?*** ○ "Oh, I am well, I have been not feeling so great but the medicine is starting to help I think because I am feeling more like myself"
Statement Elaboration	***Can I help you put your glasses on?*** ○ "Yes, that would be great, I forgot I didn't have them on." ***Can I arrange your cards for you?*** ○ "Yes, thank you" ***How are you doing today?*** ○ "Oh, I am well, I was pretty fatigued because of my heart but the medicine is starting to help I think because I am feeling more like myself" ***Would you like to look at this article I saw in the newspaper?*** ○ Sure! I love keeping up to date on things going on in the world. *comment on the article ***What would you like to eat for lunch?*** ○ "My appetite has not been the best, just a yogurt with a glass of juice please" ***Can I help open the items on your tray?*** ○ "Yes please, that yogurt sounds delicious" ***would you like to go for a wheelchair ride and then get back into bed?*** ○ "Yes, that's a good idea." ***When they give you instructions about how to get into bed*** ○ Indicate that you understand and follow commands. **Follow instructions as provided during the ROM/walk
Background Story (History of)	• CHF exacerbation • Lives at assisted living home where meals are served and assistance is provided • Utilizes walker at all times at assisted living home • Wears hearing aids and glasses
Social History	• Family is a strong support system; many cards are in the room sent from multiple family members.
Physical Exam Outline	• ***Approach the patient*** Learner enters room after washing hands with badge visible, knocks and introduces themselves Closes door for privacy Ensure glasses and hearing aides are in • ***Orienting environment***

	Ensures call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf • ***Orientation board*** Updates orientation board with missing items: Name and date • ***One on One time*** Pulls up chair to sit bedside, communicates clearly with reviewing schedule with patient Listens to patient and how they are doing • ***Current events*** Reads a headline in the newspaper and listens actively • ***Menu assist*** Assist patient with opening the menu and reviewing options for lunch that they would like to order • ***Meal environment*** Sit patient upright (if needed) Adjust tray table. Tray is delivered by staff Drape napkin across chest • ***Partial meal assist*** Allow patient to feed themselves after getting the food onto the spoon - offer ½ spoonful at a time, offer frequent liquids *Give two bites/one sip of water • ***End of meal*** Assist with wiping hands/mouth when completed • ***Prior to mobility*** Ensure walking aid and non-skid footwear are in place Clear obstacles Place gait belt on, ensure walker is in front of patient, verbal coaching: • ***Get out of bed*** Lean forward, push on hands, push feet on floor Ensure patient is standing fully upright and assess balance before walking. Assist with walking to bed while holding gait belt, follow to one side and never leave • ***Assist to walk*** Ensure patient is standing fully upright and assess balance before walking. Assist with walking while holding gait belt, follow to one side and never leave *Walk to door and back to bed • ***Assist to bed*** Stand patient near the head of the bed with the back of legs touching the bed. Have the patient reach back to the bed, bend at the waist and lower themselves down. Scoot to center of bed Push with feet to lift into bed, ensure the patient is comfortable, replace covers, put side rails up (¾) and ensure the call bell is within reach. • ***Relaxation/sleep enhancement*** Assist with relaxation: music, relaxation script, breathing exercises, body relaxation points, visualization, float in space, wake each body point Offer bathroom, warm milk/herbal tea, music, backrub

Equipment or Moulage	• Bed/Bedding • Bedside table • Meal Tray and Menu • Patient Belongings (cards, hearing aids, glasses) • White Board • Fall Risk Sign (on door) • Patient Gown (on patient) • Wheelchair, Walker, Gait belt (at bedside) • Non-skid Socks (on feet) • Trash can • Get-Well Soon Cards (5) • Call light (with patient)
Author **Date** **Revised**	• Name: Elizabeth Hill • Email: hilleg@mail.gvsu.edu • Date: 3.6.22 • Revision date: 3.19.22

Appendix 11. Age-Friendly Health Systems Course Simulation Lab

SCENARIO #1			
Title	**Patient/Environment Assessment**	**Competencies**	**Expected Learner Behaviors**
What Matters, Mentation (I) • Daily Visitor Protocol • Therapeutic Protocol	• In Bed • Orientation board in room • Patient alert and oriented, responding appropriately to greeting. • Hearing aids in but glasses on table	• Approach the patient • Orienting Environment • Orientation Board • One on One time • Current Events	• Learner enters room after washing hands with badge visible, knocks and introduces themselves • Closes door for privacy • Ensure glasses and hearing aides are in • Ensures call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf ○ Updates orientation board with missing items: Name and date • Pulls up chair to sit bedside, communicates clearly with reviewing schedule with patient • Listens to patient and how they are doing • Reads a headline in the newspaper and listens actively
What Matters, Mentation (II) • Feeding Assistance Protocol	• Menu is on bedside table with a fresh water • Patient is a full meal assist	• Menu Assist • Meal Environment • Full Meal Assist • End of Meal	• Assist patient with opening the menu and reviewing options for lunch that they would like to order • Sit patient upright (if needed) • Adjust tray table. Tray is delivered by staff • Drape napkin across chest • Offer ½ spoonful at a time, offer frequent liquids • Give two bites/one sip of water • Assist with wiping hands/mouth when completed
Mobility (III) • Early Mobility Protocol	• Walker and gait belt are next to bedside • High-risk fall patient (signage on door) • Assist with walker and gait belt (on board) • Non-skid footwear on feet	• Prior to Mobility • Range of motion • Get out of Bed • Assist to Walk • The falling patient	• Ensure walking aid and non-skid footwear are in place • Clear obstacles • Lower head of bed to lay flat • Complete ROM: arm lifts, arms over and out, arm slides, shoulder roll, elbow bends, palm up and down, wrist bends, heel slides, hip slides, ankle bends • Assist to sitting position on the edge of bed, have patient sit for a few minutes prior to moving • Pump ankles • Place gait belt on, ensure walker is in front of patient, verbal coaching: • Lean forward, push on hands, push feet on floor • Ensure patient is standing fully upright and assess balance before walking. • Assist with walking while holding gait belt, follow to one side and never leave • Walk to door and back to bed • When patient starts to fall, keep back straight, feet apart, hold patient underarms, protect head, bend at the waist while lowering to the floor – Call RN into room
Exit Room			

SCENARIO #2			
Title	**Patient/Environment Assessment**	**Competencies**	**Expected Learner Behaviors**
What Matters, Mentation (I) • Daily Visitor Protocol • Therapeutic Protocol	• In Bed • Orientation board in room • Patient alert and oriented, responding appropriately to greeting. • Hearing aids in but glasses on table	• Approach the patient • Orienting Environment • Orientation Board • Trivia	• Learner enters room after washing hands with badge visible, knocks and introduces themselves • Closes door for privacy • Ensure glasses and hearing aides are in • Ensures call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf • Updates orientation board with missing items: Name and date • Pulls up chair to sit bedside, communicates clearly with reviewing schedule with patient • Uses trivia materials to do one question
What Matters, Mentation (II) • Feeding Assistance Protocol	▪ Menu is on bedside table with a fresh water ▪ Patient is a tray set-up	• Menu Assist • Meal Environment • Tray Set-up • Companionship • End of Meal	• Assist patient with opening the menu and reviewing options for lunch that they would like to order • Sit patient upright (if needed) • Adjust tray table. *Tray is delivered by staff • Uncover/unwrap/open items on tray • Provide companionship with conversation *do not ask questions during chewing • Assist with wiping hands/mouth when completed
Mobility (III) • Early Mobility Protocol	• Wheelchair is being used by patient • High-risk fall patient (signage on door) • 1-assist PIVOT • Non-skid footwear on feet	• Prior to Mobility • Bed to Wheelchair • Pushing a Wheelchair • Wheelchair to Bed	• Ensure non-skid footwear are in place • Clear obstacles • Place wheelchair at a 90-degree angle to the bed, lock brakes, lift footrests, have patient slide to the edge of the bed with the feet on the floor, place gait belt on, ensure walker is in front of patient, verbal coaching: • Lean forward, push on hands, push feet on floor • Ensure there are no tubes to connect to the wheelchair and feet are on petals. • Release the brakes, push, re-brake ○ *Go to door and back • Place wheelchair at a 90 degree to the bed, lock brakes, lift foot rests, ask patient to slide to edge of wheelchair, ensure gait belt is on, verbal coaching: • Lean forward, push on hands, push feet on floor • Pivot to bed
Exit Room			

SCENARIO #3			
Title	**Patient/Environment Assessment**	**Competencies**	**Expected Learner Behaviors**
What Matters, Mentation (I) • Daily Visitor Protocol • Therapeutic Protocol	• In Chair • Orientation board in room • Patient alert and oriented, responding appropriately to greeting. • Hearing aids in but glasses on table	• Approach the patient • Orienting Environment • Orientation Board • Reminisce	• Learner enters room after washing hands with badge visible, knocks and introduces themselves • Closes door for privacy • Ensure glasses and hearing aides are in • Ensures call light is within reach, tray table is close/appropriate height, water-cup is full, arranges cards on shelf • Updates orientation board with missing items: name, date • Pulls up chair to sit bedside, communicates clearly with reviewing schedule with patient • Asks patient what it was like when they grew up (reminisce)
What Matters, Mentation (II) • Feeding Assistance Protocol	• Menu is on bedside table with a fresh water • Patient is a partial meal assist	• Menu Assist • Meal Environment • Partial Meal Assist • End of Meal	• Assist patient with opening the menu and reviewing options for lunch that they would like to order • Sit patient upright (if needed) • Adjust tray table. Tray is delivered by staff • Drape napkin across chest • Allow patient to feed themselves after getting the food onto the spoon - offer ½ spoonful at a time, offer frequent liquids • *Give two bites/one sip of water • Assist with wiping hands/mouth when completed
Mobility (III) • Early Mobility Protocol	• Walker and gait belt are next to bedside • High-risk fall patient (signage on door) • 1-assist with walker and gait belt (on board) • Non-skid footwear on feet	• Prior to Mobility • Assist with Walking • Assist to Bed • Relaxation • Sleep Enhancement	• Ensure walking aid and non-skid footwear are in place • Clear obstacles • Place gait belt on, ensure walker is in front of patient, verbal coaching: • Lean forward, push on hands, push feet on floor • Ensure patient is standing fully upright and assess balance before walking. • Assist with walking to bed while holding gait belt, follow to one side and never leave • Stand patient near the head of the bed with the back of legs touching the bed. • Have the patient reach back to the bed, bend at the waist and lower themselves down. Scoot to center of bed • Push with feet to lift into bed, ensure the patient is comfortable, replace covers, put side rails up (¾) and ensure the call bell is within reach. • Assist with relaxation: music, relaxation script, breathing exercises, body relaxation points, visualization, float in space, wake each body point • Offer bathroom, warm milk/herbal tea, music, backrub
Exit Room			

Appendix 12. b-CAM Education PowerPoint

Using the bCAM to Identify Delirium in Older Adults

EDUCATOR: NAME
FACILITY

FEBRUARY 22, 2022

Objectives

1. Define delirium and the occurrence of hospital-acquired delirium.
2. Identify the current protocol to recognize delirium.
3. Discuss components of hospital-acquired delirium.
4. Describe the components of the bCAM:
    a. Altered mental status/fluctuating course.
    b. Inattention.
    c. Altered level of consciousness.
    d. Disorganized thinking.
5. Distinguish charting expectations for daily bCAM delirium assessment.

2

Definition of Delirium

- Delirium is a change in consciousness characterized by rapid onset and fluctuating course of attention.
  - –Impairs the ability to process and recall information.

- Delirium is the result of a disease, intoxication of psychoactive substance, or outcome of toxin and stress buildup
  - –Develops within hours to days.
  - –Acute and usually reversible.
  - –NOT dementia.

- Identifying delirium can be difficult.

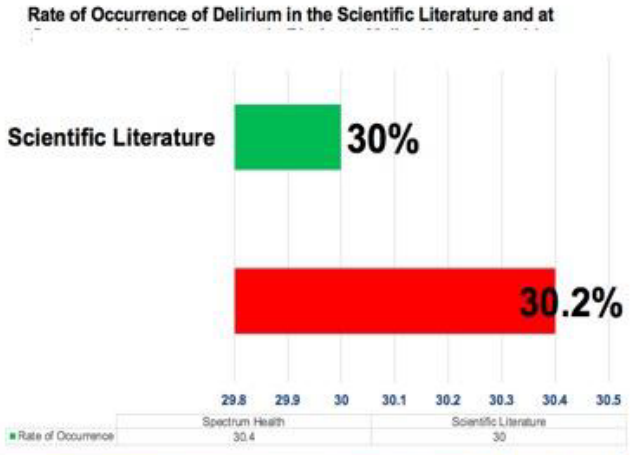
Ely, E., Kotfis, K., & Mama, A. (2018). ICU delirium—a diagnostic and therapeutic challenge in the intensive care unit. *Anesthesiology Intensive therapy*, 50(2).

Occurrence of Delirium

- Literature reports **30%** of hospitalized older adults have delirium.

Schubert, M., Schürch, R., Boettger, S., Nuñez, D. G., Schwarz, U., Bellelli, D., & Rudiger, A. (2018). A hospital-wide evaluation of delirium prevalence and outcomes in acute care patients–a cohort study. BMC Health Services Research, 18(1), 1-12.

- At this hospital system **30.2%** of hospitalized older adults had delirium. (Chart audit 2018-19; 500 patients).



Impact of Delirium

- Nationwide, delirium affects more than 2.6 million older adults a year, accounting for more than $164 billion annually in excess Medicare expenditures.

American Geriatric Society. (2019). American Geriatric Society CoCare Hospital Elder Life Program. https://help.agscocare.org/

- Delirium is associated with:
  - ✓ Increased mortality,
  - ✓ Prolonged LOS (length of stay),
  - ✓ Higher cost per case.

Schubert, M., Schürch, R., Boettger, S., Nuñez, D. G., Schwarz, U., Bettex, D., & Rudiger, A. (2018). A hospital-wide evaluation of delirium prevalence and outcomes in acute care patients-a cohort study. BMC Health Services Research, 18(1), 1-12.

5

Delirium Screening: CAM-ICU

CAM-ICU (Confusion Assessment Method for the ICU) is used in this hospital system's adult ICU's.

No screening tools are used to assess for delirium on Medical/Surgical Units.

Ely EW, Inouye SK, Bernard GR, Gordon S, Francis J, May L, Truman B, Speroff T, Gautam S, Margolin R, Hart RP, Dittus R. Delirium in mechanically ventilated patients: validity and reliability of the confusion assessment method for the intensive care unit (CAM-ICU). JAMA. 2001 Dec 5;286(21):2703-10.

Delirium Screening: bCAM

- **bCAM will be used to assess delirium on Med/Surg units.**
  - The Brief Confusion Assessment Method (modified CAM-ICU).
    - Designed to improve sensitivity in non-critically ill patients.
  - Uses objective testing to determine presence of inattention and disorganized thinking.
    - Takes <2 minutes to complete.
    - Divided into Four Features:
      1. Altered mental status or fluctuating course
      2. Inattention
      3. Altered level of consciousness
      4. Disorganized thinking

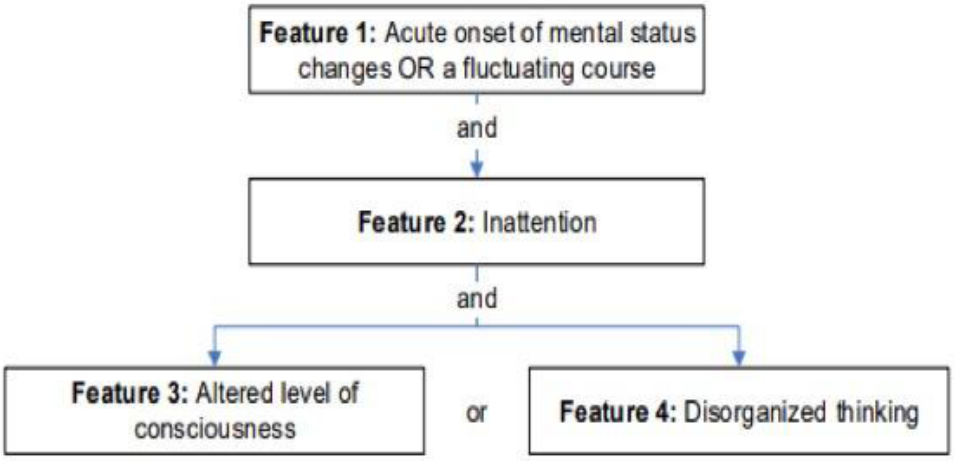
    ✓ **To be considered delirious, 3 of 4 must be (1 & 2 Features and 3 or 4).**

Han, J., Wilson, A., Vasilevskis, E., Shintani, A., Schnelle, J., Dittus, R., Graves, A., Storrow, A., Shuster, J., Ely, E.W. (2013). Diagnosing Delirium in Older Emergency Department Patients: Validity and Reliability of the Delirium Triage Screen and the Brief Confusion Assessment Method. Annals of Emergency Medicine, 62(5):457-465.

- Patient must be arousable to verbal stimuli.
  - Patients in a stupor or comatose can not be assessed.
    - Frequently transition to delirium; should be monitored once arousable to verbal stimuli.

7

bCAM Four Features



- **To be considered delirious, 3 of 4 must be (1 & 2 Features and 3 or 4).**

8

Feature 1: Mental Status Change

Acute change in mental status or fluctuating course.

- Determined by obtaining information from family member or caregiver.
  - If unavailable, this feature can be determined after the others have been performed.

Common questions asked:

✓"Has the patient been more confused to you lately?"

✓"Is the patient acting normally to you right now or does he/she seem more confused than usual?

✓"Have you noticed any fluctuations in the patient's mental status where he/she appears to be more confused at some moments and less confused at other moments throughout the course of the day?"

If a patient is identified as having either altered mental status or a fluctuating course, they are considered "positive" for Feature 1.

9

Feature 2: Inattention

Inattention.

- Can be observed during assessment:
  - Patients who are easily distractible or have difficulty keeping track of what you say are likely inattentive.
  - If you frequently have to repeat your questions to the patient and he/she does not have a history hearing impairment, then the patient is likely inattentive.
  - Patients who fall asleep during your assessment are likely inattentive
- Have the patient recite the months of the year backwards from December to July.
  - Non-delirious patients will be able to recite the months backwards without stopping.

If there is a significant pause (greater than 15 seconds) or if two or more errors are made, inattention is evident and Feature 2 is "positive".

10

Feature 3: Altered consciousness

Altered level of consciousness.

- Determined by observing the patient and using the Richmond Agitation Sedation Scale (RASS).

RASS	Description
+4	Overtly combative, violent, immediate danger to staff
+3	Very agitated, pulls or removes tube(s) or catheter(s); aggressive
+2	Agitated, frequent non-purposeful movement
+1	Restless, anxious but movements not aggressive or vigorous
0	Alert and calm
-1	Mildly drowsy, not fully alert, but has sustained awakening **(>10 seconds)**
-2	Moderate drowsy, briefly awakens with eye contact to *voice* **(<10 seconds)**
-3	Very drowsy, movement or eye opening to *voice* **(but no eye contact)**
-4*	No response to voice, but movement or eye opening to *physical* stimulation
-5*	No response to *voice or physical* stimulation

A RASS of "0" indicates normal level of consciousness. A RASS other than "0" indicates altered consciousness and Feature 3 is deemed "positive".

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Feature 4: Disorganized Thinking

Disorganized Thinking

- Determined by asking four questions and evaluating a command.
- Either question set A or B can be used.

Feature 4: Disorganized Thinking

(Use either Set A or Set B, alternate on consecutive days if necessary):

Set A	Set B
1. Will a stone float on water?	1. Will a leaf float on water?
2. Are there fish in the sea?	2. Are there elephants in the sea?
3. Does one pound weigh more than than two pounds?	3. Do two pounds weigh more one pound?
4. Can you use a hammer to pound a nail?	4. Can you use a hammer to cut wood?

Command: Say to patient: "Hold up this many fingers" (Examiner holds two fingers in front of patient). "Now do the same thing with the other hand" (Do not demonstrate). If patient is unable to move both arms, for the second part of the command ask patient "Add one more finger".

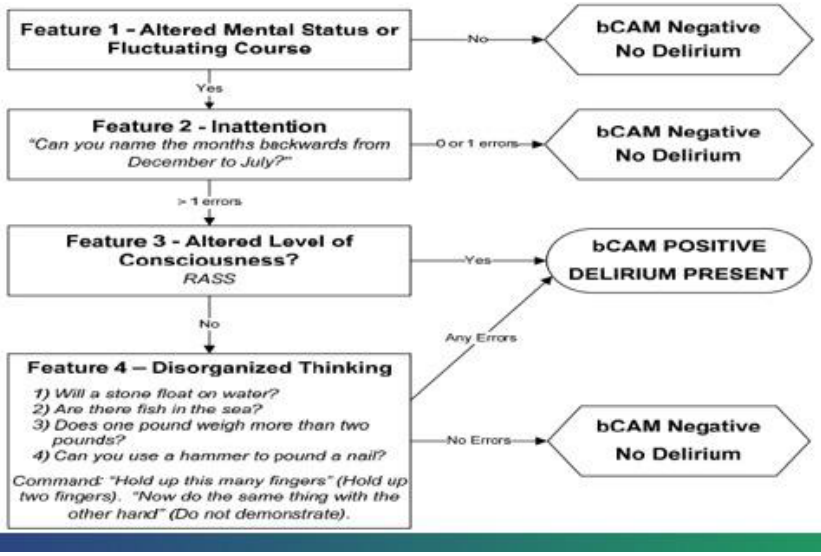
If any errors with either the questions or the command are made, patients are "positive" for having disorganized thinking (Feature 4).

A patient that does not answer questions or makes incomprehensible sounds is considered to be "positive" for Feature 4 as well.

12

Delirium Confirmation

- To be considered delirious, 3 of 4 of the Features on bCAM must be (1 & 2 Features and 3 or 4).



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RN Actions if Delirium Confirmed

Step 1:

Notify the patient's provider of an initial positive screen for delirium.

Step 2:

"Confusion, Acute" added to CPG on patient's care plan.

Future:

This system is implementing an intervention to prevent delirium in the future.

14

bCAM Frequency

- Delirium Assessment is required twice daily
  - –Every 12 hours
  - –Or once per shift.
- For adults 70 years of age and older.

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RN Documentation

- "Delirium Assessment" will populate under "Required Documentation".
- Epic Documentation "Flowsheets"
  - –Select "Cognitive"
  - –Labeled under "Delirium Assessment (bCAM)":
    - Feature 1: "positive" or "negative".
    - Feature 2: "positive" or "negative".
    - Feature 3: "positive" or "negative".
    - Feature 4: "positive" or "negative".
- **Delirium present: Either labeled "positive" or "negative".**

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Summary

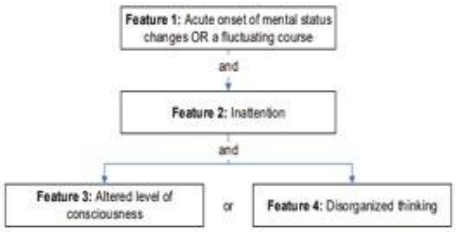
Delirium is a change in consciousness and is characterized by four components:

- Altered mental status/fluctuating course
- Inattention
- Altered level of consciousness
- Disorganized thinking

Delirium occurs in 30% of hospitalized adults and increases risk for mortality and length of stay.

RN delirium screening using the bCAM

- Takes <2 minutes to complete
- Required twice daily (Q12)
- Delirium is confirmed when the patient demonstrates positive 1 and 2 Features as well as positive 3 or 4 Features.



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Appendix 13. ELNS/ELS Competency Checklist

COMPETENCY CHECKLISTS			
Elder Life Specialist Competencies			
Online Modules	**Link**	**Date**	**Initials**
The Clinical Process: Introduction to Delirium - Clinical	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_001		
Planning for implementation and sustainability: Program Planning	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART004_001		
Planning for implementation and sustainability: Implementation Challenges	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART004_002		
Administrative Procedures: Program Overview and Structure	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART002_001		
The Clinical Process: Patient Screening and Enrollment	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_003		
The Clinical Process: Elder Life Specialist: Core Interventions	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_004		
The Clinical Process: Volunteer Training	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_005		
Administrative Procedures: Volunteer Coordination	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART002_002		
Administrative Procedures: Quality Assurance	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART002_003		
Administrative Procedures: Documenting Effectiveness	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART002_004		
Protocol Review	**Link**	**Date**	**Initials**
Daily Visitor/Orienation Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART015/125		
Therapeutic Activities Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART016/126		
Sleep Enhancement Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART017/127		
Early Mobilization Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART018/128		
Vision and Blindness Protocols	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART019/129		
Hearing Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART020/130		
Feeding Assistance Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART021/131		
Fluid Repletion Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART022/132		
Chaplaincy Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART024/184		
ELS Pain Management Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELSPainManagmentProtocol_PDF.pdf		
ELS Constipation Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELS_ConstipationProtocol.pdf		
Form Review	**Link**	**Date**	**Initials**
Patient Enrollment Form	https://help.agscocare.org/content/products/H00103/H00103_PART023_001/1-Patient_Enrollment_Form.pdf		
ELS Intervention Worksheet	https://help.agscocare.org/content/products/H00103/H00103_PART023_001/ELS_Intervention_Worksheet.pdf		
Patient Care Plan	https://help.agscocare.org/content/products/H00103/H00103_PART023_001/Patient_Care_Plan.pdf		
Volunteer Assignment Form	https://help.agscocare.org/content/products/H00103/H00103_PART023_001/Volunteer_Assignment_Form.pdf		
ELS Daily Evaluation Form	https://help.agscocare.org/content/products/H00103/H00103_PART003_001/ELS%20Daily%20Evaluation%20Form.pdf		
Volunteer Interventions Form	https://help.agscocare.org/content/products/H00103/H00103_PART023_001/Volunteer_Assignment_Form.pdf		
Master Tracking Log	https://help.agscocare.org/content/products/H00103/H00103_PART023_002/Volunteer%20Tracking%20Log.pdf		
Patient and Family Survey	https://help.agscocare.org/fulltext/null/H00103/H00103_PART023_004/139		

COMPETENCY CHECKLISTS

Elder Life Nurse Specialist Competencies

Online Modules	**Link**	**Date**	**Initials**
Administrative Procedures: Program Overview and Structure	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART002_001		
The Clinical Process: Elder Life Nurse Specialist Interventions: Part I	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_006		
The Clinical Process: Elder Life Nurse Specialist Interventions: Part II	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_007		
The Clinical Process: Patient Screening and Enrollment	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_003		
The Clinical Process: Volunteer Training	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_005		
Administrative Procedures: Quality Assurance	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART002_003		
Administrative Procedures: Documenting Effectiveness	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART002_004		
Planning for implementation and sustainability: Annual Reports	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART004_004		
The Clinical Process: Introduction to Delirium - Clinical	https://help.agscocare.org/chapter-abstract/chapter/H00105/H00105_PART003_001		
Protocol Review	**Link**	**Date**	**Initials**
Delirium Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART005/110		
Dementia Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART006/111		
Psychoactive Medications Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART007/112		
Sleep Enhancement Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART008/113		
Early Mobilization Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART009/114		
Hearing Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART011/116		
Fluid Repletion Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART012/117		
Discharge Planning Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART013/118		
Optimizing Length of Stay Protocol	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART014/119		
Hand Hygiene Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/HandHygieneProtocol_PDF.pdf		
ELNS Pain Management Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNSPainManagmentProtocol_PDF.pdf		
ELNS Aspiraton Prevention Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNS_AspirationProtocol.pdf		
ELNS Prevention of Catheter Associated UTI Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNS_CatheterUTIPreventionProtocol_PDF.pdf		
ELNS Constipation Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNS_ConstipationProtocol.pdf		
ELNS Hypoxia Protocol	https://help.agscocare.org/content/products/H00103/H00103_PART004_004/ELNS_HypoxiaProtocol.pdf		
Interdisciplinary Interventions	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART004_003/134		
Educational Interventions	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART004_005/164		
Form Review	**Link**	**Date**	**Initials**
Patient Enrollment Form	https://help.agscocare.org/content/products/H00103/H00103_PART023_001/1-Patient_Enrollment_Form.pdf		
ELNS Patient Profile Sheet	https://help.agscocare.org/content/products/H00103/H00103_PART023_003/ELNS%20Patient%20Profile.pdf		
ELNS Interventions Master Tracking Log	https://help.agscocare.org/content/products/H00103/H00103_PART023_003/ELNS%20Tracking%20Log.pdf		
ELNS Daily Evaluation Form	https://help.agscocare.org/content/products/H00103/H00103_PART023_003/ELNS%20Daily%20Evaluation.pdf		
HELP Interdisciplinary Rounds Form	https://help.agscocare.org/fulltext/chapter/H00103/H00103_PART004_003/134		
ELNS Telephone Follow-up Form	https://help.agscocare.org/content/products/H00103/H00103_PART023_004/ELNS%20Telephone%20Follow%20Up.pdf		

Appendix 14. Epic Documentation

CoCare HELP Smartphrase
Key: *** to be filled in for each individual patient
( ) are drop down menus that need to be populated within the smartphrase.

Hospital Elder Life Program
"Preventing Delirium and Functional Decline During Hospitalization"

*** has been screened and enrolled in the **Hospital Elder Life Program (CoCare HELP)** on *** date. They will begin to receive in person, telephonic, or virtual interventions carried out by specially trained volunteers and the Elder Life Specialist that will **help prevent delirium and functional decline** during their hospital admission.

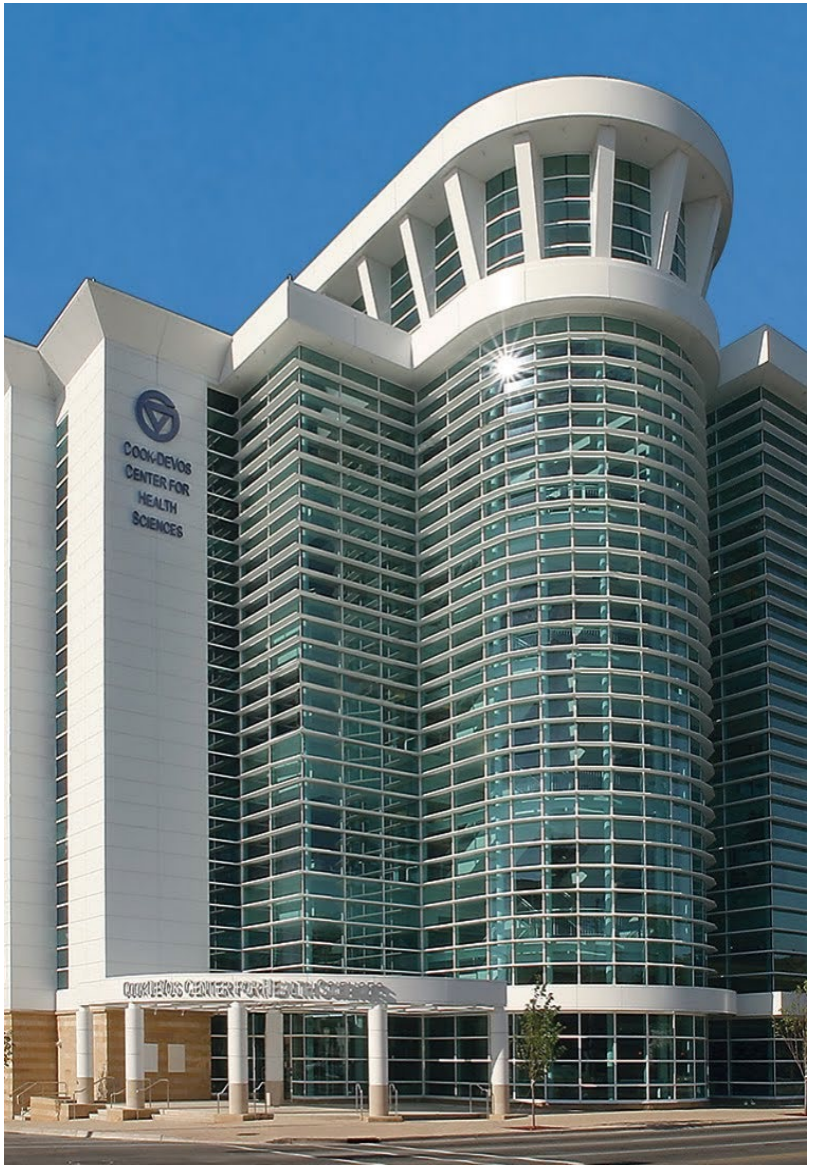
*** is at increased risk of hospital acquired delirium and/or functional decline because of:

- Cognitive impairment as evidenced by the Short Portable Mental Status Exam, attention tasks, or the B-CAM; interventions such as (orientation, therapeutic activities) will be implemented.
- Mobility impairment as evidenced by self-report from the patient and/ or patient care companion. The early mobilization protocol will be implemented to include (ROM exercises, walking with assistance with approval from primary RN and appropriate device (gait belt, cane, front wheel walker)).
- Vision impairment as evidenced by (patient report, need for glasses or other visual aids, difficulty seeing properly). Interventions such as (large print text, lighted magnifying glass provided, visual cues with bright tape on call light and phone, ensuring patient is wearing their prescribed glasses) will be implemented.
- Hearing impairment as evidenced by the whisper test. Interventions such as (ensuring patient is wearing their hearing aids, provided pocket talker hearing amplifier and headphones, speaking slowly and clearly, referral for cerumen disimpaction) will be implemented.
- Dehydration/ poor appetite as evidenced by BUN/Creatinine ration of *** or RN report. Interventions such as (fluid repletion protocol, encouragement of oral intake, feeding assistance and encouragement) will be implemented.
- Sleep impairment as self-reported by the patient and/ or patient care companion. Interventions such as (provide a warm drink, calm music, hand massage, noise and light reduction) will be implemented.

We appreciate your support of the Hospital Elder Life Program and look forward to enhancing your patient's stay. Should you have any questions or concerns please contact our Elder Life Specialist *** at *** or our Elder Life Nurse Specialist *** at ***.

Reducing Delirium & Functional Decline in Hospitalized Older Adults: *Pre-implementation of CoCare HELP®*

An Evidence-Based Intervention



DNP Project: Defense
Autumn Baldwin, RN
Tom Finn, RN
Elizabeth Hill, RN
April 4, 2022

GRAND VALLEY STATE UNIVERSITY
KIRKHOF COLLEGE OF NURSING

Acknowledgements

Advisor: Sandra Spoelstra, PhD, RN FGSA, FAAN.

Faculty Advisory Team:

- Amy Manderscheid, DNP, RN.
- Marie VanderKooi, DNP, RN.

Site Mentor: Dr. Iris Boettcher.

Site Expert Implementation Team (EIT) Members:

- QI Department.
- Several others.

Objectives for Presentation

1. To review the problem (delirium) and solution (CoCare HELP) within context of the organizational assessment and SWOT analysis.
2. To review CoCare HELP and alignment with "Age Friendly Health System" initiative.
3. To state the clinical problem.
4. To report on implementation plan modifications.
5. To defend the results of the project.
6. To discuss sustainability and dissemination plan.
7. To report on enactment of the DNP Essentials.

Introduction: The Problem

"An acute and usually reversible effect that results from a disease, intoxication of psychoactive substances, or outcome of toxin and stress buildup" (Ely et al., 2018).

- ✓ 2.6 million older adults affected per year.
- $164 billion annually in excess Medicare expenditures (American Geriatric Society [AGS], 2019).
- Increased mortality.
- Prolonged length of stay.
- Higher cost per case (Schubert et al., 2018).
- Identification of delirium can be difficult.
- Appropriate treatment varies case by case.

The Focus: Prevent Delirium

Introduction: The Solution

Hospital Elder Life Program (HELP) Program (known as CoCare HELP) is a bundle of evidence-based interventions that bring geriatric expertise to the forefront of patient care decisions to prevent delirium and functional decline (AGS, 2019).

CoCare HELP has a streamlined, stepwise approach, and aims to embed fundamental geriatrics principles into existing care structures (AGS, 2019).

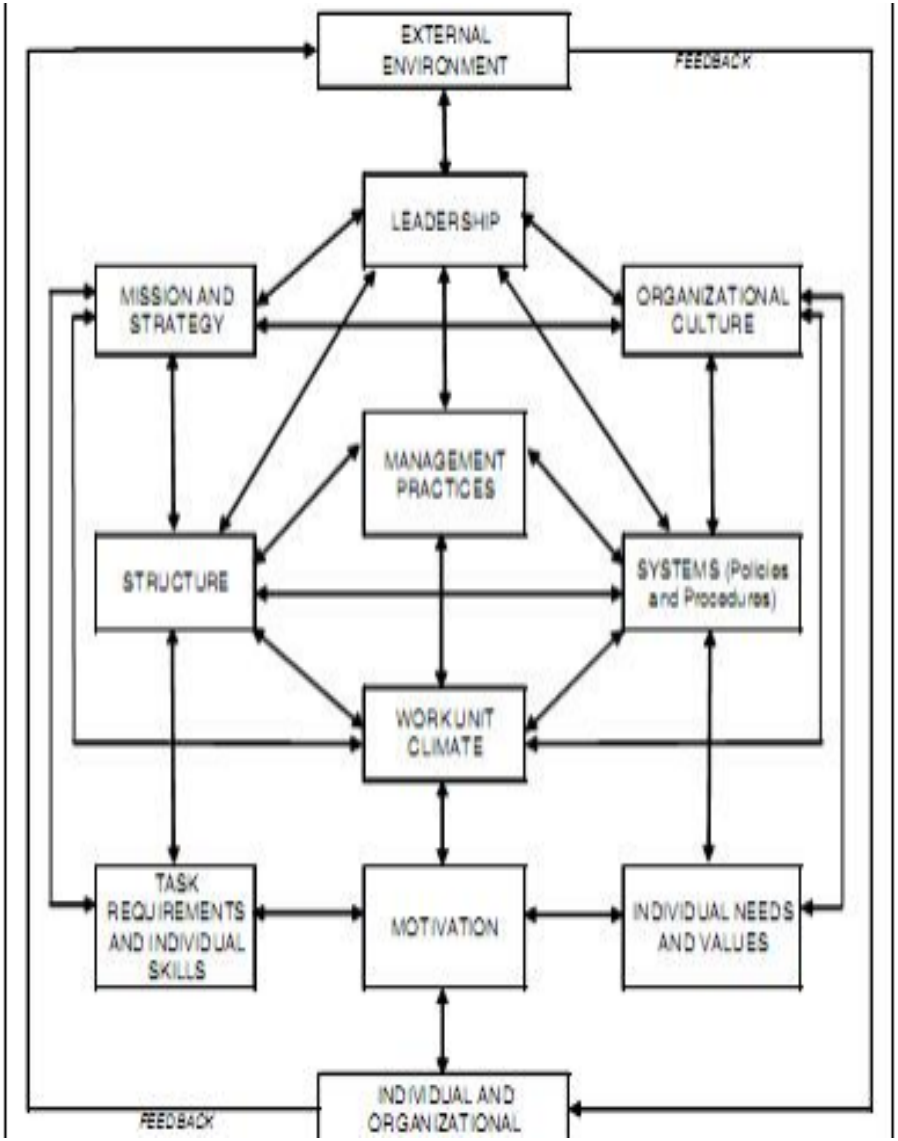
- Targeted interventions.
- Skilled interdisciplinary team.
- ***Benefits:***
  - Reduced hospital costs over **$7 million** annually, over **$1000 per patient** hospitalization (AGS, 2019).
  - Reduced delirium over **30%** in hospitals deploying HELP (AGS, 2019).

Organizational Assessment

Organizational Assessment Framework

- ***Rationale for selection of Framework:*** Comprehensively examines 12 factors that effect large scale change in a large organization.

  Burke & Litwin (1992)



Current State of Organization

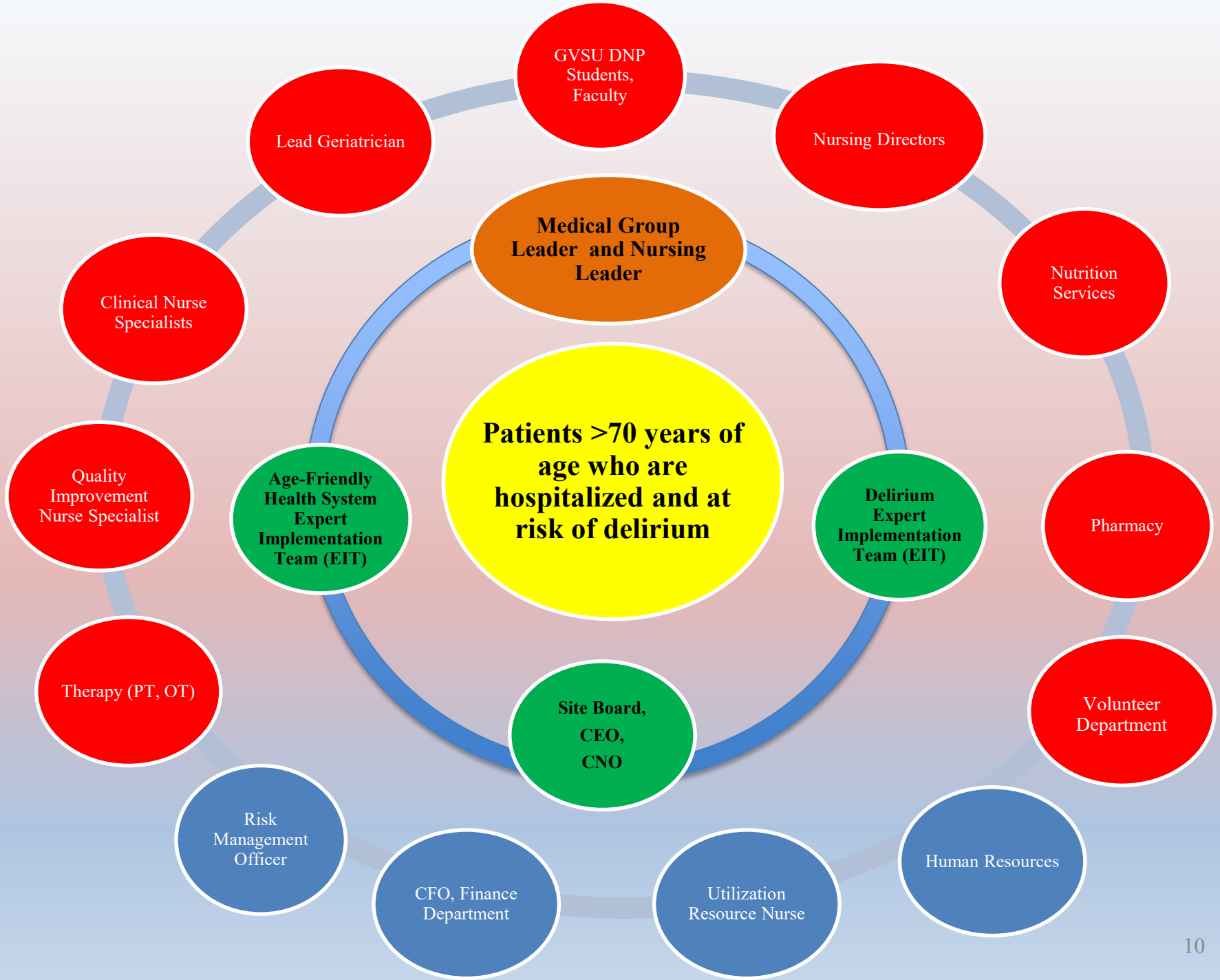
CoCARE HELP: "Getting Started" Financial Projection

Concept	Description of Data Request	Comments	Amounts
Hospital Data	# of staffed beds in the hospital	Often staffed are less than licensed, due to nursing shortage or lack of demand	1,377 beds
	Hospital occupancy rate (of staffed beds)	High occupancy rates may indicate capacity issues, and impact where the program will be most helpful	N/A
	Average Length of Stay for all cases	Expect this to be lower than the next two	4.11 days
	Average Length of Stay for patients >= 70 years old	Important to be estimating # of days for volunteer visits	5.61 days
	Average Length of Stay for patients >= 70 years AND with LOS >2	This is the "best" proxy for estimating the likely LOS of the patients who be enrolled in	6.72 days
	Total annual admissions	Simple volume indicator	32,355 admissions
	Admissions to general medicine units (modify this according to the sites designated for your program, for instance surgical units)	Assumed that general medicine units are the focus of the HELP program – modify this according to your program	1,467 admissions
	Admissions to general medicine units for patients >= 70 years old	If you plan to establish the program in other areas, such as *Surgery*, then ask for admission to *those* units	498 admissons
	Admissions to general medicine units for patients >= 70 years old AND with LOS > 2 days	Same as above regarding *which* units. These cases are the core focus of the HELP program	400 admissions

Total	Description	Amounts
Salary & Benefits	Estimated annual part-time salary for the Elder Life Specialist role [ELS] (BA or MA level)	$34,850 annually
	Estimated annual full-time salary for the Elder Life Nurse Specialist [ELNS] (APRN with geriatrics experience)	$108,200 annually
	Estimated annual full-time salary for a Geriatrician (MD); The Medical Group Management Association 2001 Compensation median for Geriatricians is $157,092, as a placeholder.	$240,000 annually
	Estimated annual full-time salary for a Program Director (could be any of the positions above, or someone else).	$100,800 annually
	Estimated benefits rate for the ELS, ELNS, and program director (staff benefits rate)	30% rate
	Estimated benefits rate for Geriatrician (MD rate)	30% rate
	Total Expenses	**$483,8050 annually**

Current State of Organization

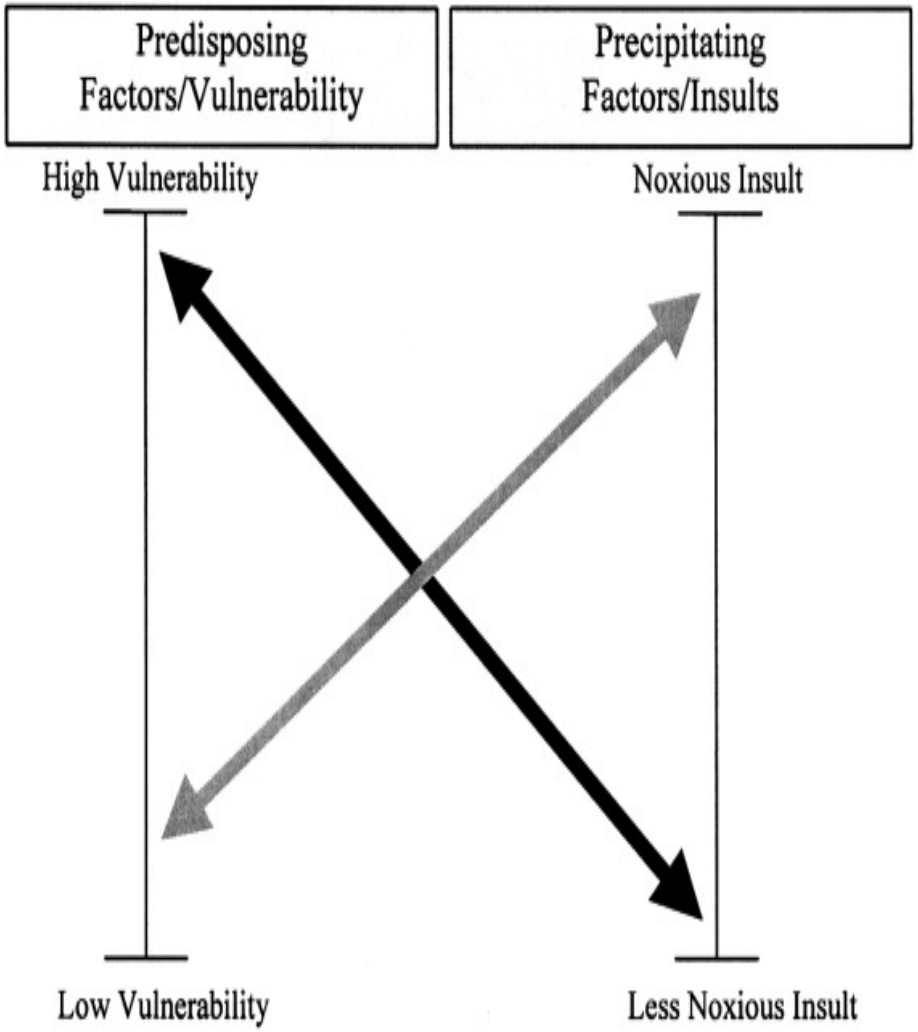
CoCare Help Protocol	EHR Charting Availability	Current site Training RNs/NTs
Assessment (CAM)	**Available (CAM-ICU)**	ICU onboarding
Orientation	**All but one available** **Not available: updated orientation board**	Onboarding; classroom/preceptor
Vision	**Available**	Onboarding; preceptor
Hearing	**Available**	Onboarding; preceptor
Mobilization	**Available**	Onboarding; classroom/preceptor
Fluid Repletion	**Available**	Onboarding; classroom/preceptor
Feeding	**Available**	Onboarding; preceptor
Sleep	**All but one available** **Not available: hand lotion**	Onboarding; preceptor
Therapeutic Activity	**Available**	**None**


GVSU DNP Students, Faculty
Lead Geriatrician
Nursing Directors
Medical Group Leader and Nursing Leader
Nutrition Services
Clinical Nurse Specialists
Quality Improvement Nurse Specialist
Age-Friendly Health System Expert Implementation Team (EIT)
Patients >70 years of age who are hospitalized and at risk of delirium
Delirium Expert Implementation Team (EIT)
Pharmacy
Therapy (PT, OT)
Site Board, CEO, CNO
Volunteer Department
Risk Management Officer
CFO, Finance Department
Utilization Resource Nurse
Human Resources

Phenomenon Model

- ***Rationale for selection of Model:*** Ultimately, improved care for patients with delirium could occur by identifying predisposing factors and risks and enacting evidence-based interventions.

(Inouye, 1999)



SWOT Analysis

Strengths	Weaknesses
• A large resource rich healthcare system. • Defined vision, mission, and strategic plan. • **Supportive leadership. Multiple stakeholders.** • **EHR.** • Committed/motivated employees who strive to promote positive patient outcomes & safety • **Interdisciplinary, engaged, motivated Expert Implementation Team (EIT).**	• **Complex management structure.** • **Lack of delirium prevention policies, procedures and competencies.** • **Not utilizing EHR tools.** • Staff turnover. • **Poor outcomes: LOS, readmission, falls restraint/safety attendant/BEERs/antipsychotics** • **Delirium assessments inconsistent/not done.**
Opportunities	**Threats**
• **Alignment with Age Friendly Health System.** • **Evidence-based intervention CoCare HELP: products (modules/forms) & supports (online group).** • **Improved outcomes: LOS, readmission, falls restraint/safety attendant/BEERs/antipsychotics.** • **Reduced cost (through reducing delirium rates).** • **EHR is adaptable.** • **Volunteers: Universities with healthcare students; and/or retired RN's.**	• Cost and implementation. • Time to implement. • Competing for resources (time/money). • **EHR to include CoCare interventions** • **Volunteer availability (use within system) recruitment, retention, and training.** • Lack of staff to implement interventions. • Staff turnover. • **Initial and repeated need for education**

Clinical Practice Question

The clinical practice question for this project is:

- *Will the implementation of a CoCare HELP an evidence-based program to prevent and reduce the incidence of delirium reduce 30-day readmission rates, LOS, and falls with injuries in hospitalized adults greater than 70 years of age?*

Evidence-based Intervention

CoCare HELP

CoCare HELP Targets

- Targets six known delirium risk factors:
  - Cognitive impairment.
  - Sleep deprivation.
  - Immobility.
  - Visual impairment.
  - Hearing impairment.
  - Dehydration.

(Caplan and Harper, 2007; Inouye et al., 2000; Inouye et al., 1999).

CoCare HELP Intervention Bundle

ELNS:

- Conduct Geriatric Clinical and Cognitive Assessments.
- Provide nursing interventions.
- Provide education.
- Coordinate interdisciplinary team rounds.
- Monitor and record adherence to nursing interventions.
- Facilitate discharge planning.

ELS:

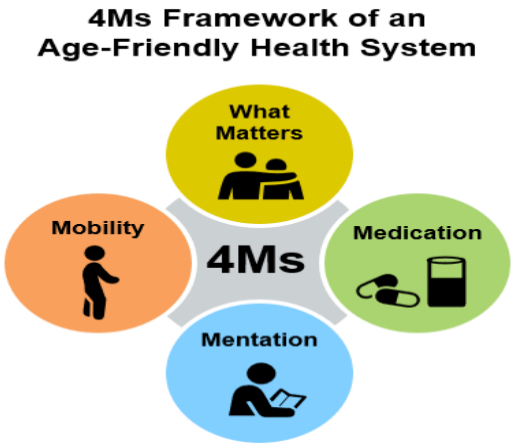
- Conduct screening & enrollment.
- Design care plan & assign protocol.

Volunteers:

- Conduct walking or range-of-motion exercises (early mobilization).
- Therapeutic activities.
- Feeding assistance.
- Orientation.

Age Friendly Health Systems

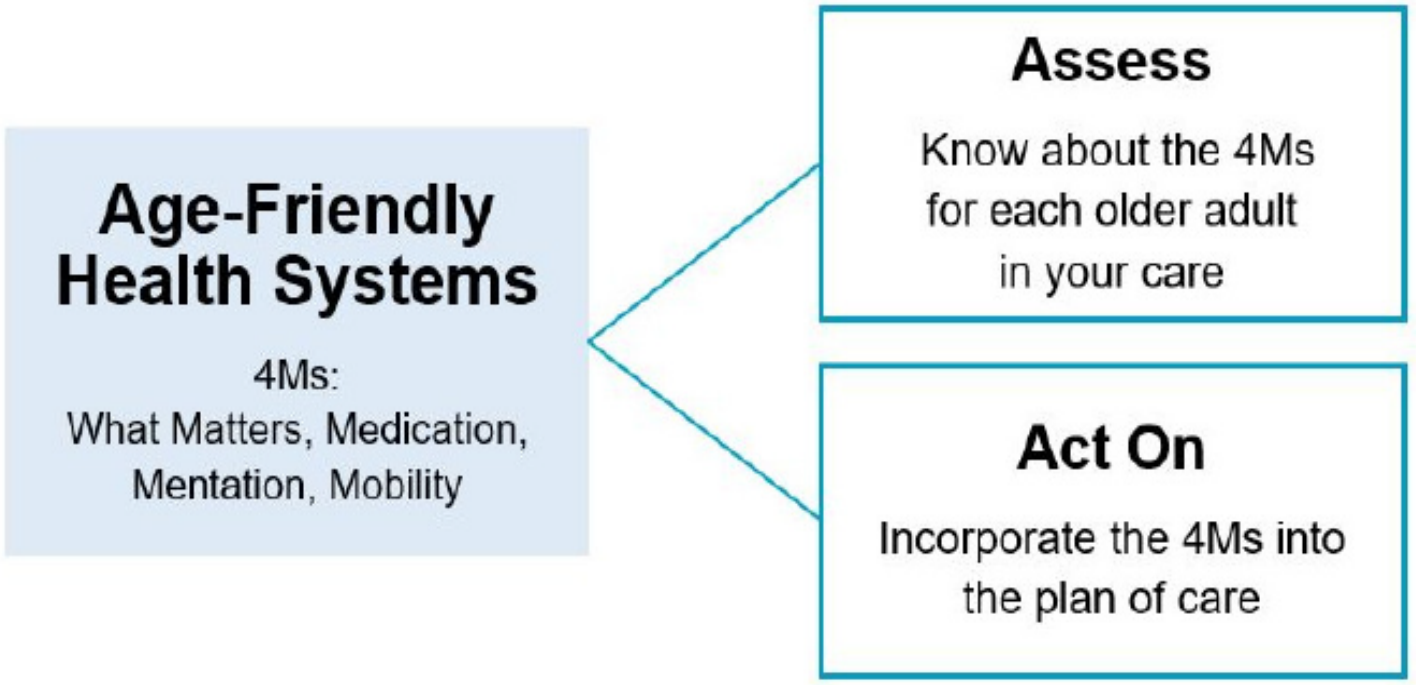
Alignment



Age Friendly Health Systems (AFHS)

There are two key drivers of age-friendly care: knowing about the 4Ms for each older adult in your care ("assess"), and incorporating the 4Ms into the plan of care accordingly ("act on") (see Figure 2). Both are supported by documentation and communication across settings and disciplines.

Figure 2. Two Key Drivers of Age-Friendly Health Systems



4M Core Elements & Interventions

The 4Ms	Description
Matters Most	Know & align care with each older adult's specific health outcome goals and care preferences across settings of care
Medications	Use only medications that do not interfere with What Matters most, Mobility, or Mentation across settings of care
Mentation	Prevent, identify, treat, & manage dementia, depression, and delirium across settings of care
Mobility	Ensure that older adults move safely every day to maintain function and do What Matters

Fulmer T, Mate KS, Berman A. *J Am Geriatric Soc*. 2018 Jan;66(1):22-24.

CoCare HELP Addresses 4Ms

The 4Ms	Proven Outcomes of CoCare HELP
Matters Most	***Addresses what matters most:*** ❑ Improved quality of care. ❑ Reduced complications and resource costs. ❑ Reduced hospital re-admissions.
Medications	***Stops use of deliriogenic drugs:*** ❑ Reduced use of BEERs and anti-psychotic meds.
Mentation	***Prevents Delirium:*** ❑ Decreased onset of delirium from 15% of cases to 9.9% (a 34% reduction). ❑ Increased scores on patient cognitive functioning tests.
Mobility	***Prevents falls:*** ❑ Less need for patient restraints.

Note: See references in notes.

Alignment

- **CoCare HELP**
  - Can be a critical cornerstone of participation as an Age Friendly Health System.
  - Provides care targeted to the four geriatric "M"s of the Age Friendly Health System.

Leah Ann Lamb, a volunteer with the Hospital Elder Life Program (HELP), visits with a patient at University Hospital. The HELP program—designed to prevent delirium in patients—offers a low-tech, high-touch approach that helps relax and orient the patient, improves the quality and safety of care, and saves the hospital money.

Literature Review

Purpose, Aims & Methods

Purpose of review: To guide selection of CoCare HELP implementation strategies within the Midwestern hospital system.

Aim: To answer the question: "*What CoCare HELP implementation strategies are effective?"*

Method: The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guided the review (Moher et al., 2009).

- *Databases:* PubMed, Google Scholar, and CINAHL databases.
- *Type:* systematic reviews, cluster/randomized trials, case & observational studies.
- English during 2016 to 2021.
- *Keywords:* Hospital Elder Life Program, implementation, strategies, CoCare, HELP, delirium, Inouye, and Rubin.
- *Inclusion criteria:* English language, between 2016-21, with keywords for CoCare HELP. *Exclusion criteria:* did not identify implementation strategies, not in English, patients <65, or outpatient setting.
- *Population:* nursing staff in ICU and general medical units, elderly >65, volunteers, hospital administration, and HELP staff.

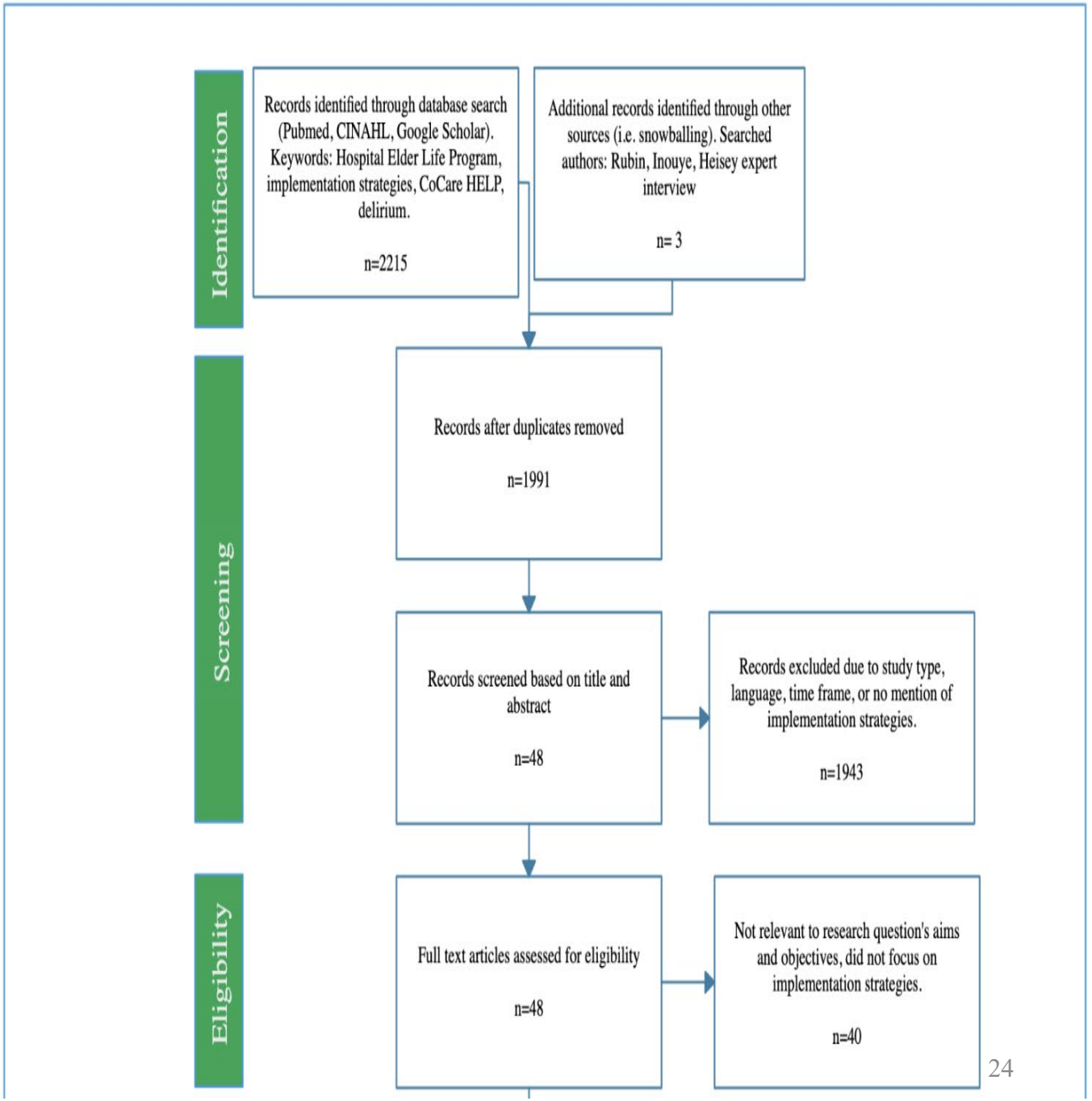
PRISMA Figure

(Moher, et al., 2009)

Yield: 2,215 articles and 3 from secondary sources.

- 227 duplicates removed.
- Titles were reviewed for relevance and 1,943 articles were removed.
- 48 remaining abstracts were reviewed for inclusion criteria.
- Full text articles were resulting in removal of 40 articles.

Results: 8 articles remained in the review.



Evidence-based Implementation Strategies (Powell, 2015) *student recommended **faculty recommended	Rate of occurrence	Source
Education & training*	9	Chen (2017); Young (2021); McClay (2021); Mudge (2018); Huson (2016); Steunenberg (2018); Wang (2020); McClay (2021); expert recommended
Audit & feedback*	6	Young (2021); Mudge (2018); Hshieh (2020); expert recommended; Wang (2020); McClay (2021)
Champions*	6	Mudge (2018); expert recommended; Young (2021); Huson (2016); Hshieh (2020); Wang (2020)
Facilitation (internal)**	6	Young (2021); Mudge (2018); McClay (2021); Hshieh (2020); Wang (2020); McClay (2021)
Intervention adaptation and/or modification*	6	Hshieh (2020); Chen (2017); Young (2021); Huson (2016); Wang (2020); McClay (2021)
Family engagement	5	Hshieh (2020); Mudge (2018); Huson (2016); Wang (2020); McClay (2021)
Organizational assessment**	4	Young (2021); McClay (2021); Mudge (2018); expert recommended
Buy-in	3	McClay (2021); Young (2021); Mudge (2018)
Satisfaction (patient/staff) **	3	Huson (2016); Steunenberg (2018); expert recommended
Create new clinical teams**	2	Chen (2017); Young (2021)
Quality monitoring tools**	2	Hshieh (2020); Wang (2020)
Key stakeholder*	2	Mudge (2018); expert recommended
Stakeholders*	2	Mudge (2018); expert recommended
Facilitation (external) **	1	Mudge (2018)
Visit other sites	1	Young (2021)
Provide clinical supervision	1	Mudge (2018)
Purposely reexamine implementation	1	Mudge (2018)
Dynamic training	1	Huson (2016)
Shadow other experts	1	Young (2021)
Coaching	1	Steunenberg (2018)

***students recommended**
****faculty recommend**

PROJECT PLAN

Purpose, Objectives, Type, & IRB

Project purpose: The hospital system identified a problem with delirium; purchased CoCare HELP as a solution to decrease delirium rates and improve quality of care. Then formed an EIT and requested DNP students assist with implementation.

Objectives:

1. Complete an organizational assessment.
2. Review the literature on effective CoCare: HELP implementation strategies.
3. Identify and work alongside stakeholders.
4. Align with the health systems mission and goals (e.g., Age Friendly).
5. Improve quality metrics, clinical practice, patient care, and reduce delirium.

Project Type: Evidence-based Practice Implementation & Quality Improvement.

IRB Determination (available upon request):

- Designated as nonhuman subject research (quality improvement).
- Required data be stored on internal drive and managed internally.

Setting & Participants

Setting: a Midwestern hospital system.

Stage 1 Proposed pilot project unit.

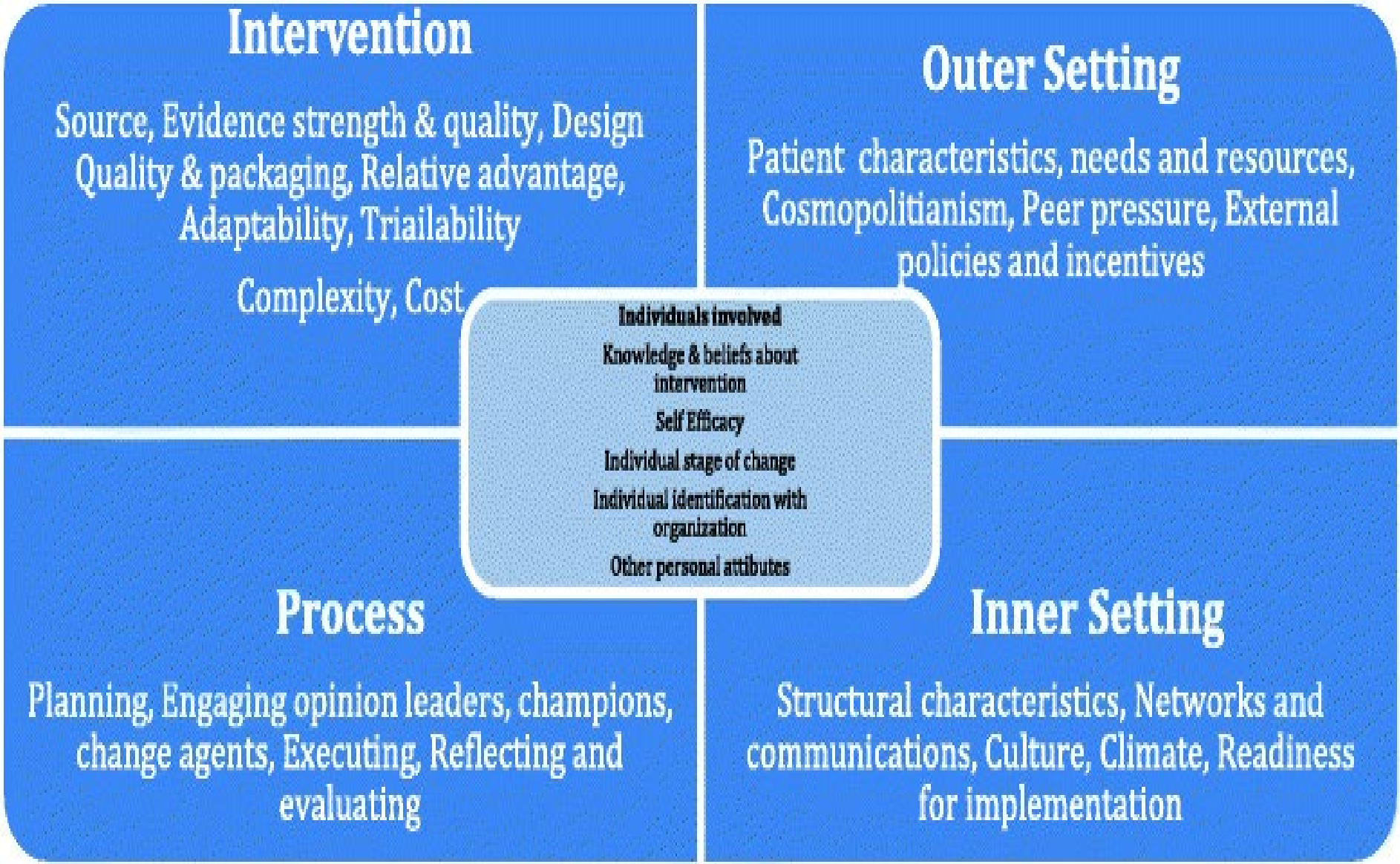
Stage 2 Adult units in health system.

Participants: include the following.

- Patients age >70 years old at risk for developing dementia during hospitalization.
- ELNS, ELS, volunteers.
- Providers, RNs, nursing, assistants, PTs, OTs, and Dieticians.
- EIT members.
- Other staff as applicable.

Implementation Framework

Consolidated Framework For Implementation Research (CFIR)



#	Implementation Strategy	Mapping of the Implementation Strategy on CFIR Implementation Framework
1	**Organizational Assessment**	Inner/Outer Setting
2	**Key Stakeholders**	Characteristics of the Individuals Involved
3	**Champions**	Characteristics of the Individuals Involved
4	**Create New Clinical Teams**	Inner/Outer Setting
5	**Education & Training**	Intervention Characteristics
6	**Utilize New Clinical Teams**	Inner Setting
7	**Facilitation (Internal & External)**	Process of Implementation
8	**Audit & Feedback**	Process of Implementation
9	**Satisfaction (Patient & Staff)**	Characteristics of the Individuals Involved
10	**Public Relations**	Inner Setting

Implementation Strategies

#1 Organizational Assessment

The first implementation strategy was to: "Assess various aspects of an organization to determine its degree of readiness to implement, barriers that may impede implementation, and strengths that can be used in the implementation effort" (Powell et al., 2015).

- The assessment was completed.
- Methods used to obtain information included:

- Expert interviews.
- Financial projections.
- Crosswalks between EHR documentation and education in place.
- Baseline data on key items of importance to delirium management as deemed necessary by the EIT.
- A SWOT analysis.

#2 Stakeholders

The second implementation strategy was to: "Create and engage a formal group of multiple kinds of stakeholders to provide input and advice on implementation efforts and to elicit recommendations for improvements" (Powell et al., 2015).

- Delirium EIT included interdisciplinary stakeholders.
- GVSU faculty to create volunteer training course.
- Team stakeholders to be engaged:
    - Geriatrician.
    - A Program Director (future).
    - ELNS (future).
    - ELS/Volunteer Coordinator (future).

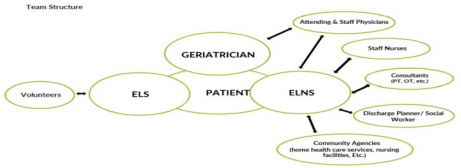
#3 Champions

The third implementation strategy was to: "Identify and prepare individuals who dedicate themselves to supporting, marketing, and driving through an implementation, overcoming indifference or resistance that the intervention may provoke in an organization" (Powell et al., 2015).

Stage 1 Champions on pilot project unit would include:

- Nurse manager
- RNs.
- Unit pharmacist.
- Unit dietitian.
- Therapy.
- Chaplain.
- Care manager/Social worker.

#4 Create Clinical Team



The fourth implementation strategy was to: "Change who serves on the clinical team, adding different disciplines and different skills to make it more likely that the clinical innovation is delivered (or is more successfully delivered)" (Powell et al., 2015).

Elder Life Specialist (ELS)	**Elder Life Nurse Specialist (ELNS)**	**Geriatrician**	**Program Director**
Responsible for day-to-day operations of the program, patient screening and coordination of the volunteers	Provides comprehensive geriatric assessment, develops practice strategies to prevent delirium; rounds with nursing staff	Participates in interdisciplinary rounds, provides education to physicians and liaison with hospital medical staff	Can be assumed by Geriatrician or ELNS, provides overall leadership

#5a Education & Training

The fifth implementation strategy was to: "Plan for and conduct training in the clinical innovation in an ongoing way" (Powell et al., 2015).

✔ Online modules available from AGS CoCare HELP specific to each role.

ELNS (7.2 hours) **Stage 1-students Stage 2-APPs**

- Introduction to Delirium (60 minutes)
- Patient Screening and Enrollment (40 minutes)
- ELS Core Interventions (90 minutes)
- ELNS Interventions Part 1 (105 minutes)
- ELNS Interventions Part 2 (90 minutes)
- Volunteer Coordination (45 minutes)

ELS (5.4 hours) **Stage 1-students Stage 2-RNs**

- Introduction to Delirium (60 minutes)
- Patient Screening and Enrollment (40 minutes)
- ELS Core Interventions (90 minutes)
- ELNS Interventions Part 2 (90 minutes)
- Volunteer Coordination (45 minutes)

Volunteers (3.7 hours online modules, 16 hours in person [Volunteer RN trainer]), plus hospital on-boarding)

- In person training (two 8 hour training days; 16 hours)
- Introduction to Delirium Lay Person (30 minutes)
- Patient Screening and Enrollment (40 minutes)
- Volunteer Training (150 minutes)
- Standard Volunteer Training and Onboarding as recommended by hospital

RNs (1 hour) b-CAM education: education department assisted by students (60 minutes CEU)

#5b Education & Training

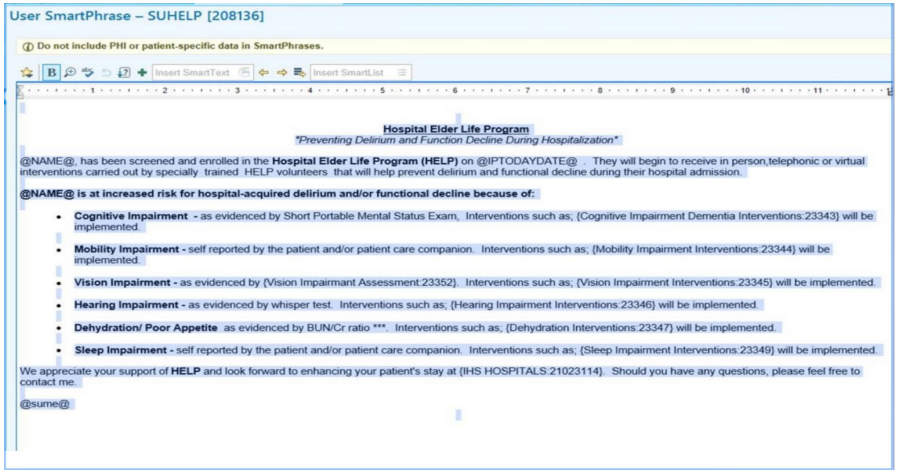
- Training on documentation will be as follows:
  - **ELNS:**
    - Reviews patient enrollment form that has been completed by ELS, determines appropriate CoCare HELP interventions for implementation. Reviews patient clinical status daily.
  - **ELS:**
    - Pulls daily report from the EHR with admission date and time, age, sex, unit, bed, primary diagnosis, b-CAM result, isolation status, vision, hearing, speech, neuro symptoms, last BUN/ Creatinine, diet orders, language, and fall risk category.
    - Document patient enrollment using form provided by CoCare HELP (available on CoCare website within implementation toolkit).
    - Document interventions and coordination of care using a smart phrase in the EHR (example on next slide).
  - **Volunteers:**
    - Document on paper volunteer assignment form provided by CoCare HELP (available on CoCare website within implementation toolkit).
  - **RNs:**
    - Document b-Cam per hospital policy (develop by Education Department).

    Note: For the pilot the ELNS (DNP students) will conduct b-Cam assessment and document in EHR flowsheet once daily (Monday-Saturday).

#6 Utilize Clinical Team

The sixth implementation strategy was to: "Create and engage a formal group of multiple kinds of stakeholders to provide input and advice on implementation efforts and to elicit recommendations for improvements." (Powell et al., 2015).

- Pilot project **Stage 1**.
  - Expert Susan Heisey recommended beginning on 1 unit to start.
  - Per experts, this initial pilot will take approximately 6 - 12 months.
- Students to complete ELS and ELNS training per CoCare HELP website.
  - Note: DNP Students Graduate - April 2022.
- Engage Volunteer Department to recruit, train, and schedule volunteers.



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Hospital Elder Life Program
"Preventing Delirium and Function Decline During Hospitalization"

@NAME@, has been screened and enrolled in the **Hospital Elder Life Program (HELP)** on @IPTODAYDATE@ . They will begin to receive in person,telephonic or virtual interventions carried out by specially trained HELP volunteers that will help prevent delirium and functional decline during their hospital admission.

@NAME@ is at increased risk for hospital-acquired delirium and/or functional decline because of:

- **Cognitive Impairment** - as evidenced by Short Portable Mental Status Exam, Interventions such as; {Cognitive Impairment Dementia Interventions:23343} will be implemented.
- **Mobility Impairment** - self reported by the patient and/or patient care companion. Interventions such as; {Mobility Impairment Interventions:23344} will be implemented.
- **Vision Impairment** - as evidenced by {Vision Impairmant Assessment:23352}. Interventions such as; {Vision Impairment Interventions:23345} will be implemented.
- **Hearing Impairment** - as evidenced by whisper test. Interventions such as; {Hearing Impairment Interventions:23346} will be implemented.
- **Dehydration/ Poor Appetite** as evidenced by BUN/Cr ratio ***. Interventions such as; {Dehydration Interventions:23347} will be implemented.
- **Sleep Impairment** - self reported by the patient and/or patient care companion. Interventions such as; {Sleep Impairment Interventions:23349} will be implemented.

We appreciate your support of **HELP** and look forward to enhancing your patient's stay at {IHS HOSPITALS:21023114}. Should you have any questions, please feel free to contact me.

@sume@

Orientation Protocol	All patients receive intervention: - Mild or no cognitive impairment: orient 1x/day - Moderate cognitive impairment: orient 3x/day		
Orientation board	Fill out the dry erase board in the room with date, RN, NT, doctor, meal times, tests and activities	No	
Lighting	Adjust lighting in the room with curtains and lights above bed	Yes	Flowsheets > Adult PCS Body System > Safety Management > Lighting adjusted
Call light within reach	Make sure the patient knows how to utilize the call light and it is within reach of the patient	Yes	Flowsheets > Adult PCS Body System > Safety Factors > Call light within reach
Review Medication list	Review to evaluate appropriateness and for potential delirium inducing medication	Yes	Flowsheets > Adult PCS Body System > Safety Management > Medications Reviewed
Orienting patient	Review orientation questions with the patient	Yes	Flowsheets > Adult PCS Body System > Cognitive

#7 Facilitation

The seventh implementation strategy was: "A process of interactive problem solving and support that occurs in a context of a recognized need for improvement and a supportive interpersonal relationship" (Powell et al., 2015).

- Keep it simple:
  - **External Facilitation: Stage 1 & 2**
    - Attend CoCare HELP Session online (monthly)
    - Deanna Santos, Consultant (as needed).
    - Expert input (as needed).
  - **Internal Facilitation**: **Stage 1 & 2**
    - Inform Unit Manager (weekly Email).
    - Attend daily unit huddles (3x week).
    - Attend unit meetings (when scheduled).
    - Use email to communicate (as needed).
    - Fliers (huddle board/Break room for unit s
    - Utilize basic motivational prompts:
      - "How is CoCare going?"
      - "How is implementation going?"

#8 Audit & Feedback

The eight implementation strategy was to: "Collect and summarize clinical performance data over a specified time period and give it to clinicians and administrators to monitor, evaluate, and modify provider behavior" (Powell et al., 2015).

- ❑ Audit (QA monitoring) specified measures:
  - System measures.
  - Patient outcomes (general; individually).
  - Program outcomes.
  - Implementation outcomes.
  - Policy.
- ❑ Feedback provided to stakeholders:
  - CEO, CNO, CFO, UR, QI (quarterly).
  - EIT (monthly).
  - Unit Manager (weekly Email), RNs, NTs (monthly Email).
  - Volunteers (monthly).

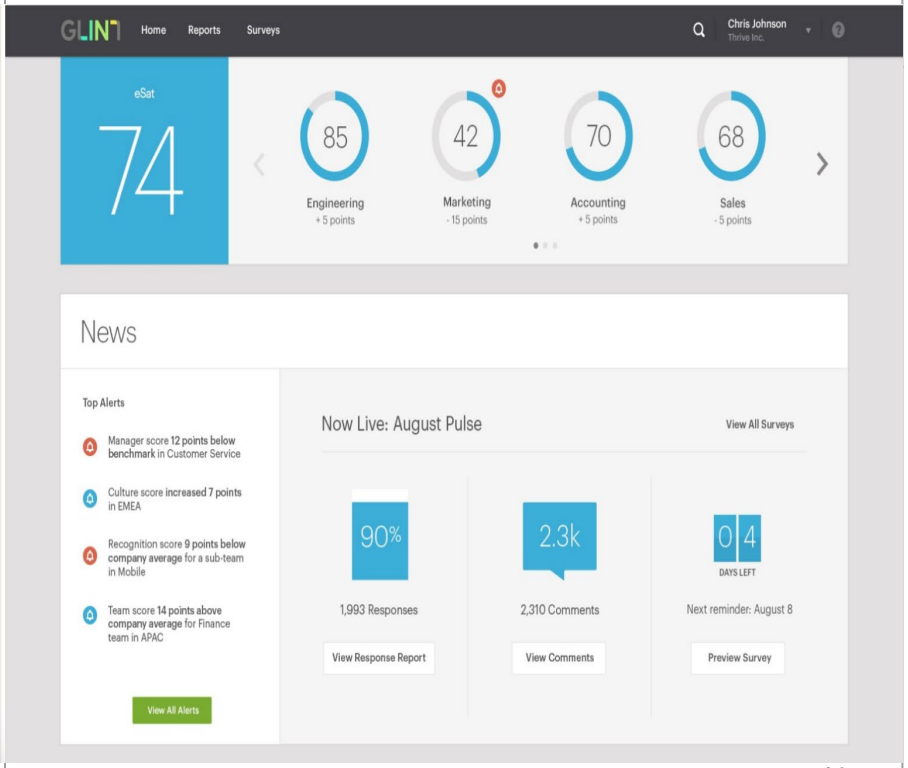
#9 Satisfaction

- Pre-implementation data are being obtained and will be compared to post-implementation results.

Press-Ganey (Patient)

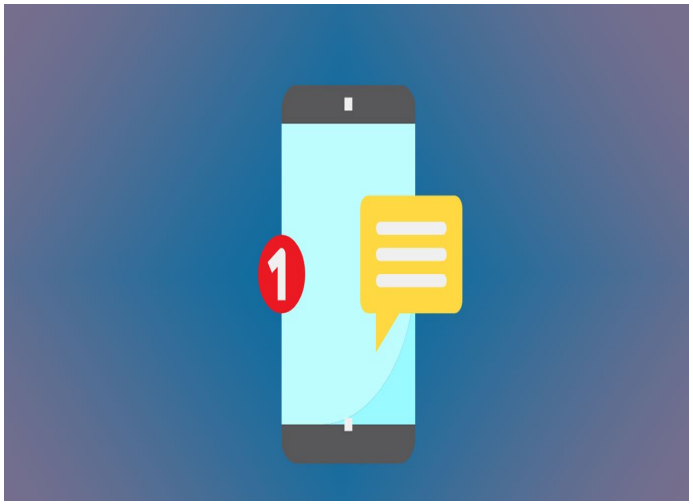
CARE PROVIDER	Very Poor 1	Poor 2	Fair 3	Good 4	Very Good 5
During your visit, your care was provided primarily by a doctor, physician assistant (pa), nurse practitioner (np), or midwife. Please answer the following questions with that health care provider in mind.					
1) Friendliness/courtesy of the care provider	○	○	○	○	○
2) Explanations the care provider gave you about your problem or condition	○	○	○	○	○
3) Concern the care provider showed for your questions or worries	○	○	○	○	○
4) Care provider's efforts to include you in decisions about your treatment	○	○	○	○	○
5) Information the care provider gave you about medications (if any)	○	○	○	○	○
6) Instructions the care provider gave you about follow-up care (if any)	○	○	○	○	○
7) Degree to which care provider talked with you using words you could understand	○	○	○	○	○
8) Amount of time the care provider spent with you	○	○	○	○	○
9) Your confidence in this care provider	○	○	○	○	○
10) Likelihood of your recommending this care provider to others	○	○	○	○	○
11) Comments (describe good or bad experience):					

Glint Survey (Staff)



#10 Public Relations

The tenth implementation strategy was to: "Use media to reach large numbers of people to spread the word about the clinical innovation" (Powell et al., 2015).



Keep the Healthcare System community updated:

- Monthly Newsletter (draft).
- Annual Report (draft).
- Main Website (draft).
- Insite (draft).
- Fliers/brochures for patients and families in waiting areas (draft).

Measures
&
Evaluation

Measures & Evaluation

- System Outcomes: LOS, readmissions, safety attendant orders, cost of program.
- Patient Outcomes:
  - General: falls, falls with injury, restraint hours, BEERs meds, anti-psychotic meds
  - CoCare HELP Individual: change in SPMSQ, ALD, LOS; and discharge status.
  - CoCare HELP Program: delirium rate, number served, volunteer hours/interventions, ELS/ELNS interventions.
- Implementation Outcomes: education uptake/satisfaction, number of champions/volunteers/PR events.
- Satisfaction Outcomes: staff, volunteers, patients.
- Policy Outcomes: number new or modified.

Analysis Plan

- Quantitative analysis:
  - Descriptive statistics:
    - To explain participant:
      - Characteristics and demographics.
    - To explain the frequency of pre-/post-implementation comparison
      - Falls, LOS, use of restraints, safety attendants, and others.
      - Per Table of Measures (handout).
- Qualitative analysis:
  - Thematic analysis: Of statements or comments.

Project Plan Modifications

Modifications

- Due to the COVID-19 pandemic and staffing shortages, the health system determined a pilot project could not be conducted until a later date, changes were made:
  - **Stage 1 - Pre-implementation Project.**
  - **Stage 2a - Pilot Project.**
  - **Stage 2b - Adult Units Health System.**
- **Students shifted priorities to program development and completion of products to support implementation**:
  - GVSU Age-Friendly Health Systems Course.
  - Implementation Toolkit.
  - Registered Nurse b-CAM education module.
  - ELNS/ELS Competency Checklist.
  - EHR Documentation.

- Pilot project will be implemented during Stage 2a.

Strategies Completed	Strategies Partially Completed	Strategies Not Completed
#1. Organizational assessment. **#2.** Engage stakeholders. **#3.** Identify champions. **#7.** Facilitation.	**#4.** Create a clinical team. **#5.** Education and Training. **#8.** Audit and feedback. **#9.** Satisfaction. **#10.** Public Relations.	**#6.** Utilize a clinical team.

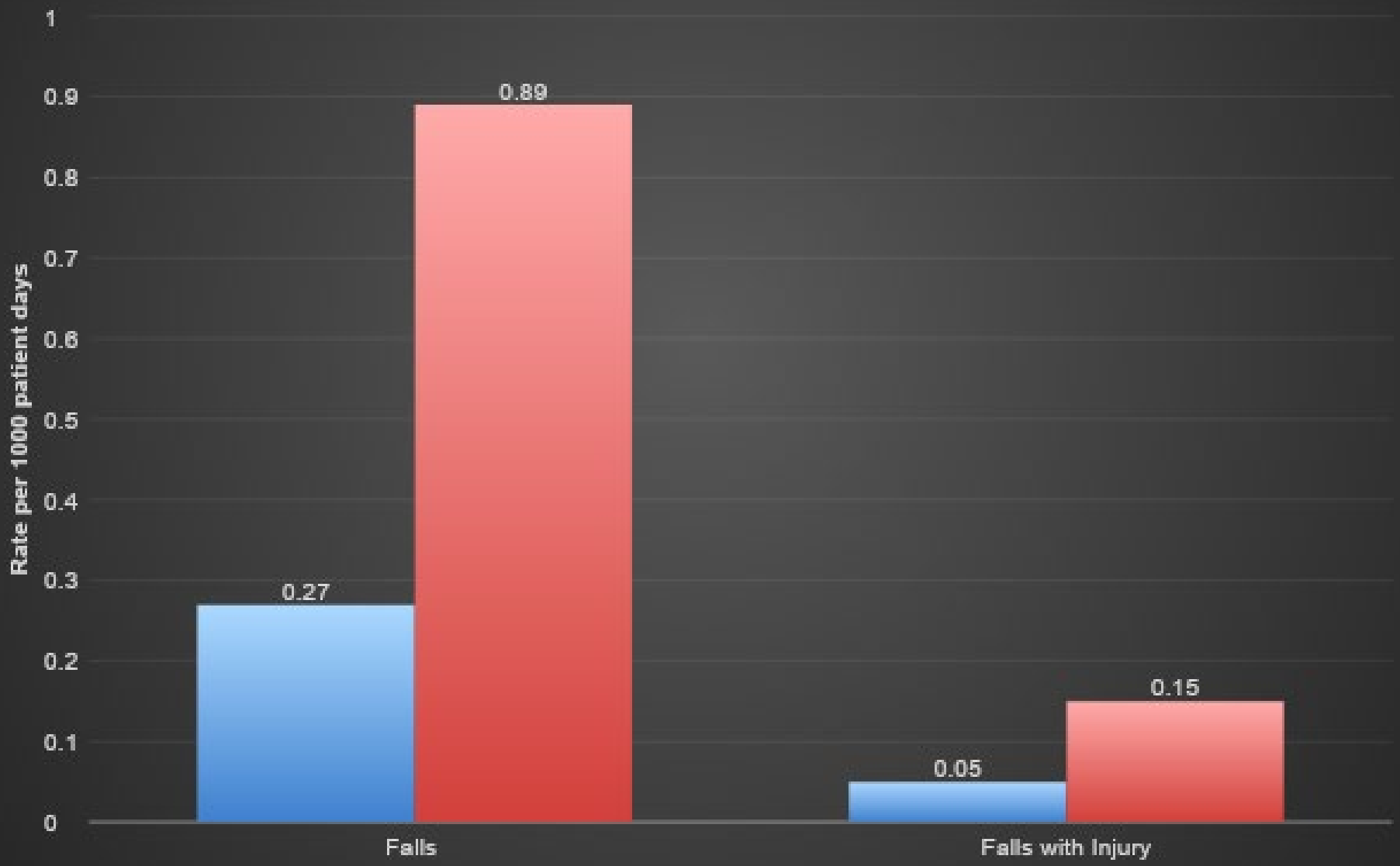
Note: Pilot project projected to be enacted in Fall of 2022

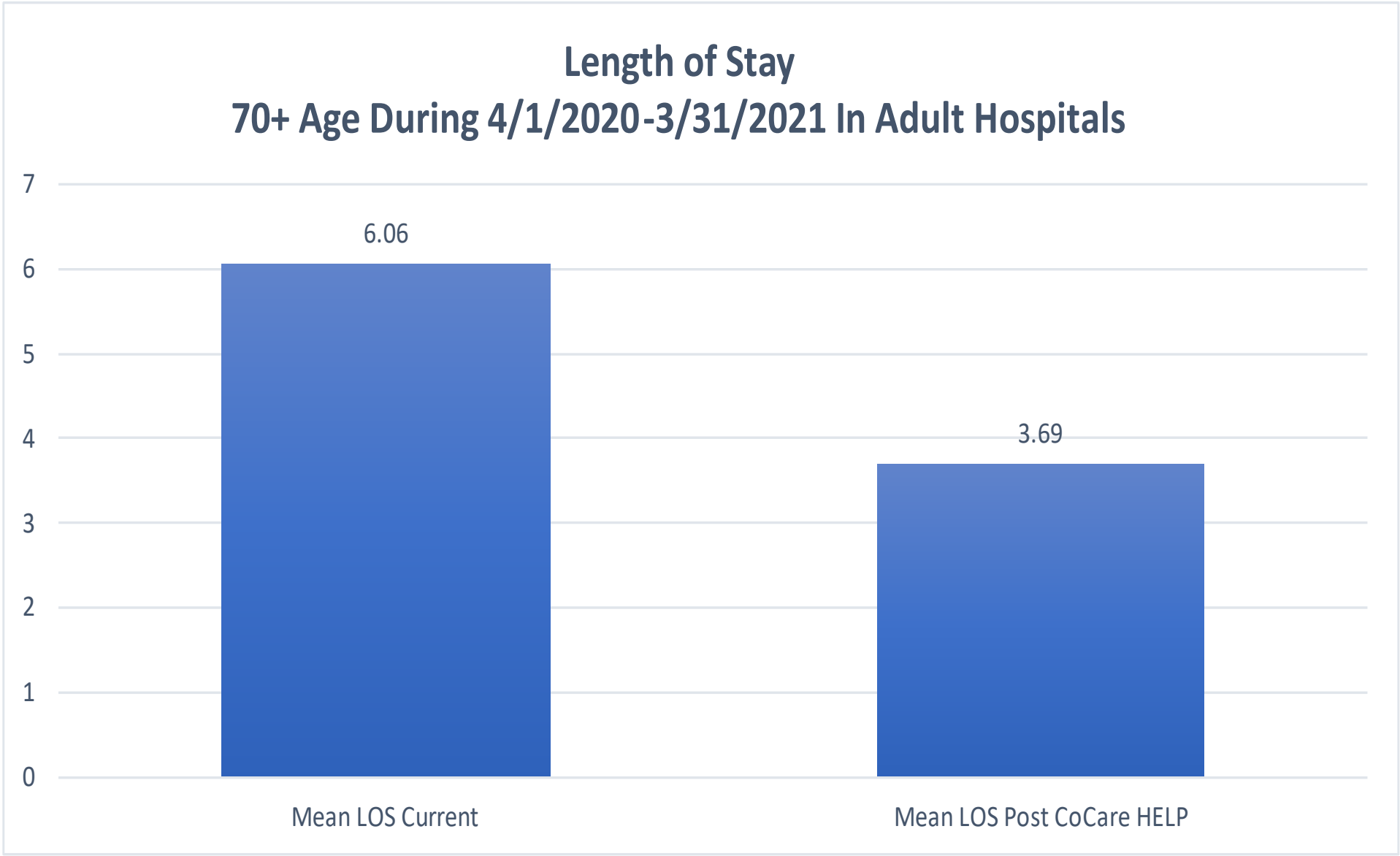
Results

Strategy #1 & 8: Organizational Assessment and Audit & Feedback

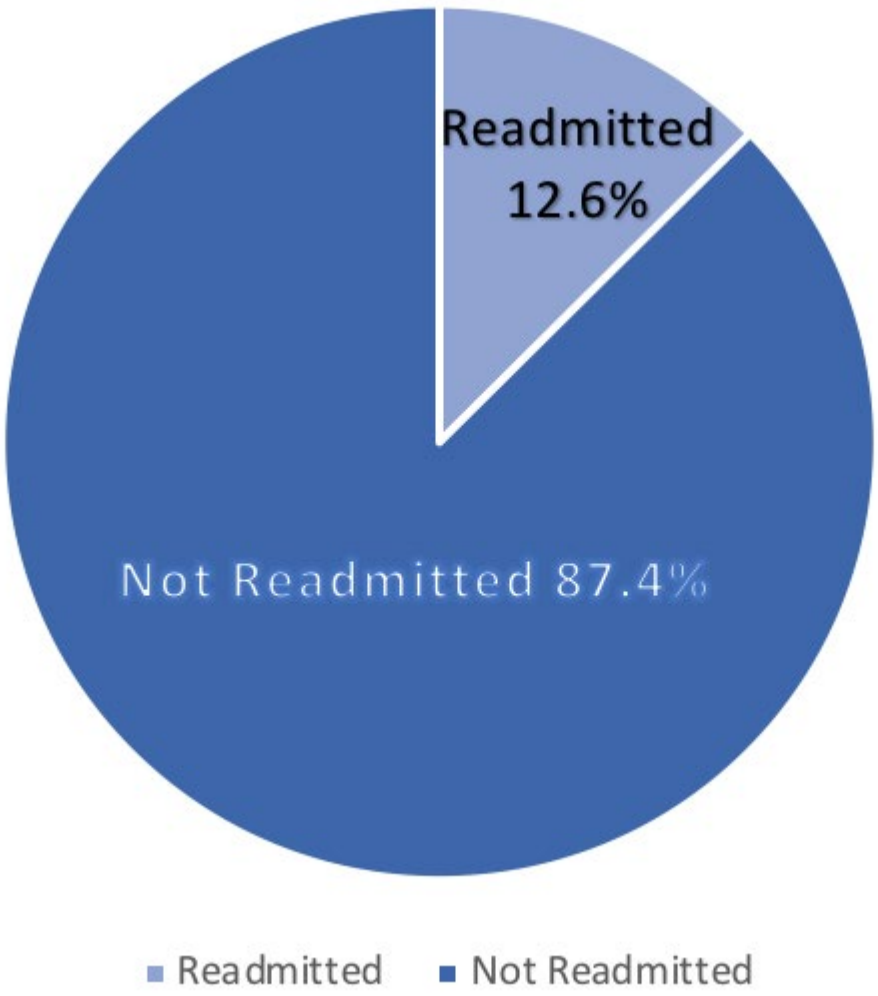
- Data were audited:
  - To understand elements of care, the delirium rate within the context of organizational assessment.
  - To identify implementation strategies for the organization.
- Feedback was reported to:
  - The EIT.
  - The Acute Care Management Team to fund FTEs.
  - Site Leadership.

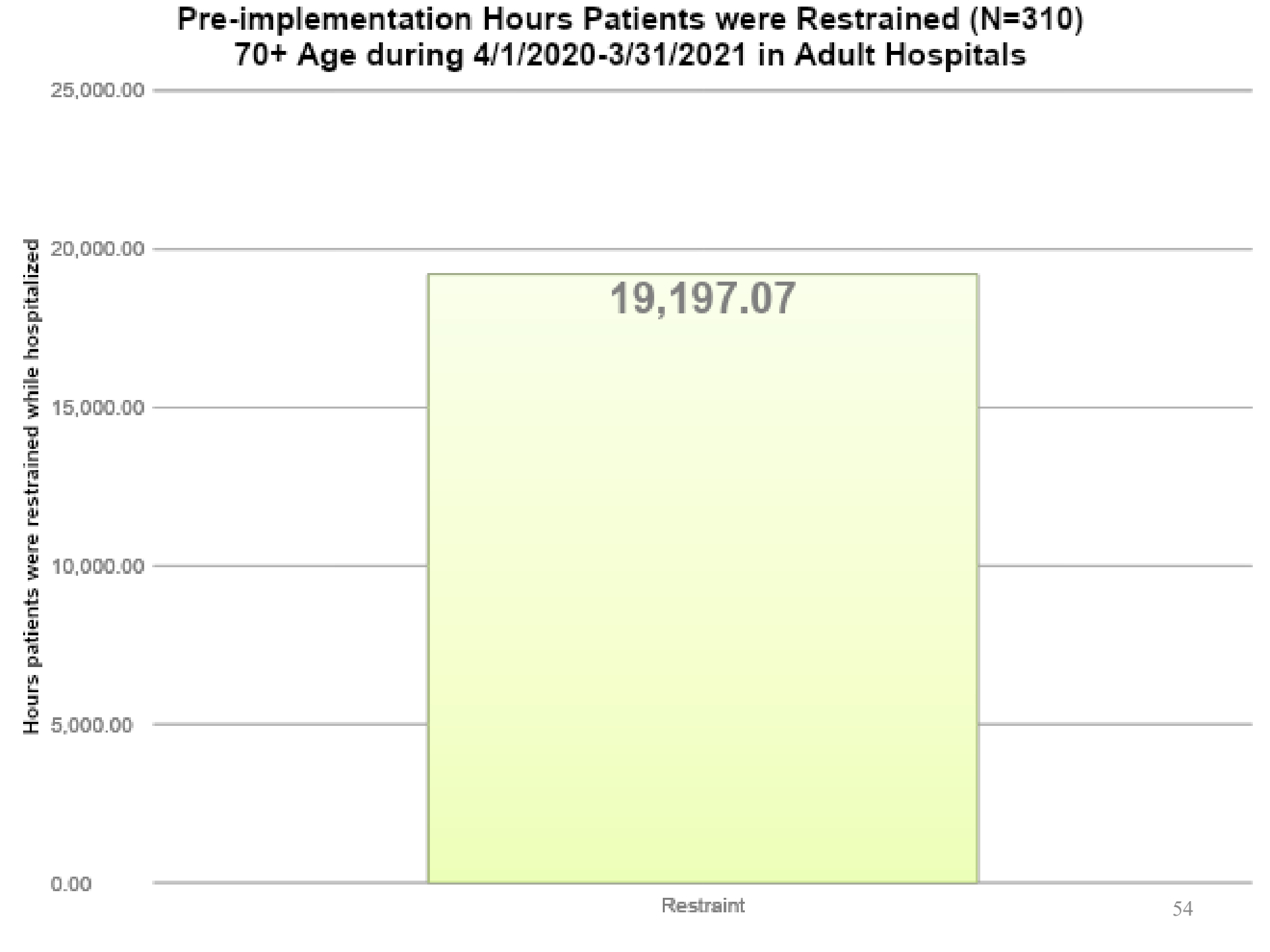
Pre-Implementation Fall & Fall Injuries in all Age and in those 70+ Age Patients 6/1/2020 – 5/31/2021

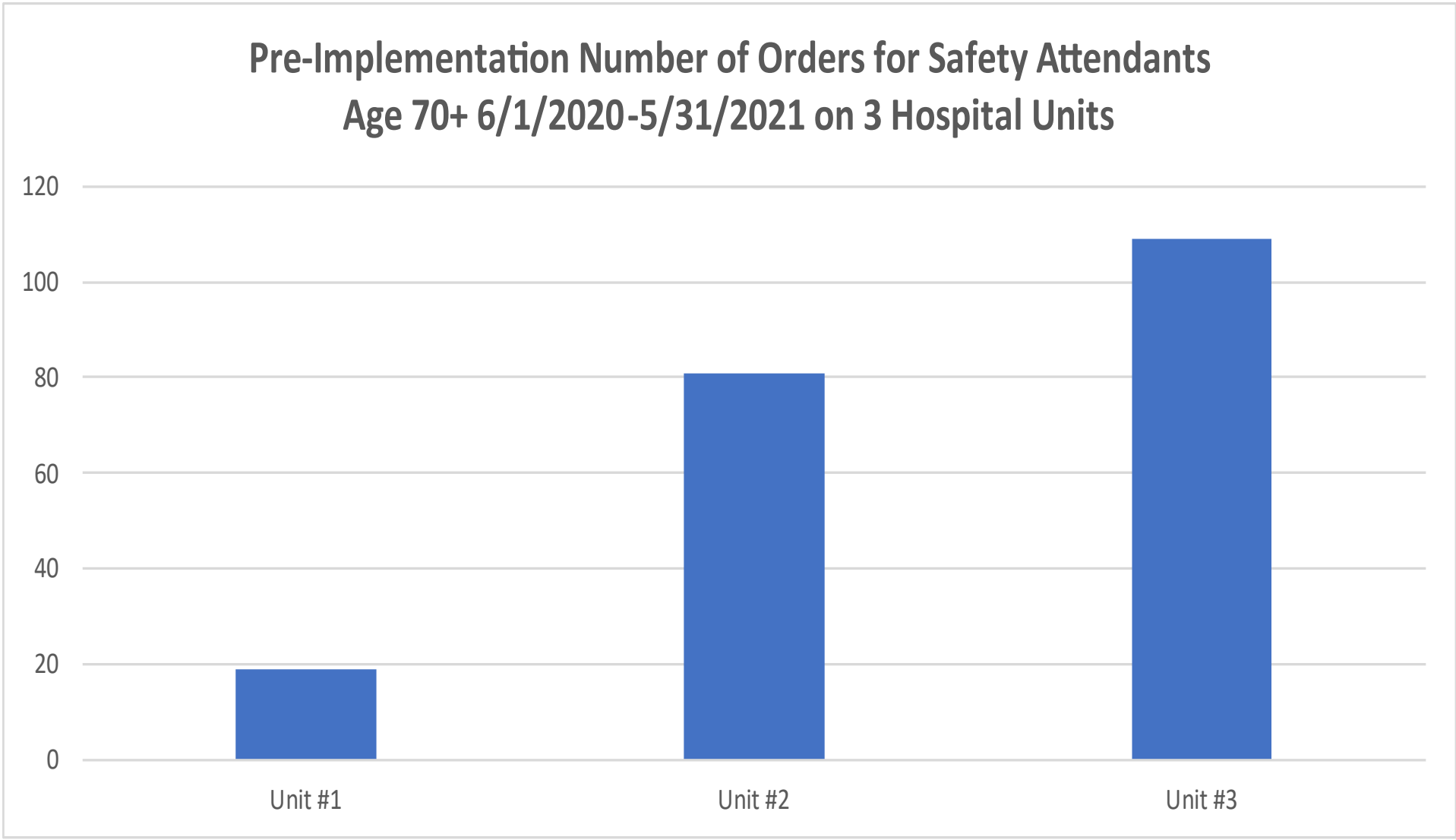



Length of Stay
70+ Age During 4/1/2020-3/31/2021 In Adult Hospitals
7
6
5
4
3
2
1
0
6.06
3.69
Mean LOS Current
Mean LOS Post CoCare HELP

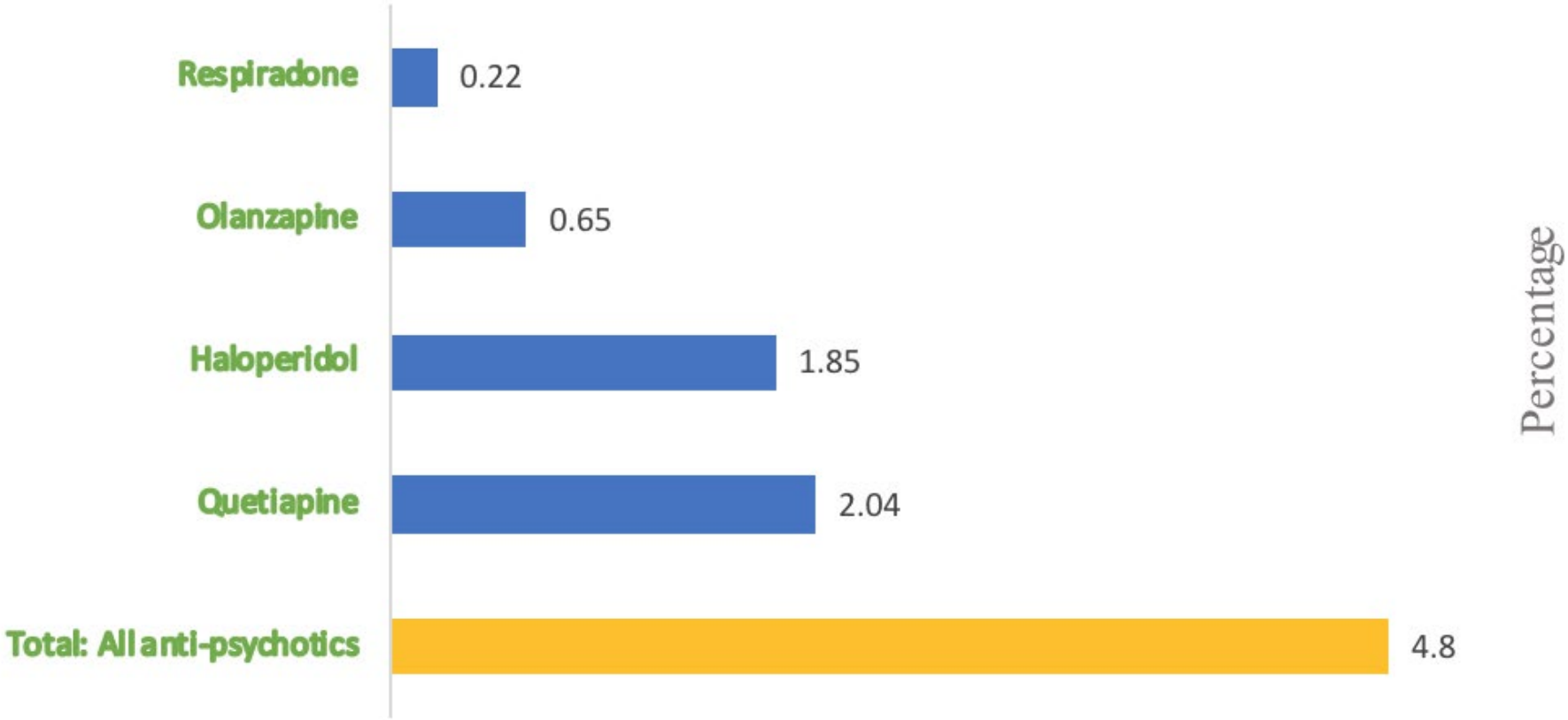
Pre-implementation Percent of All-Cause Readmission Rate 70+ Age during 4/1/2020-3/31/2021 in Adult Hospitals



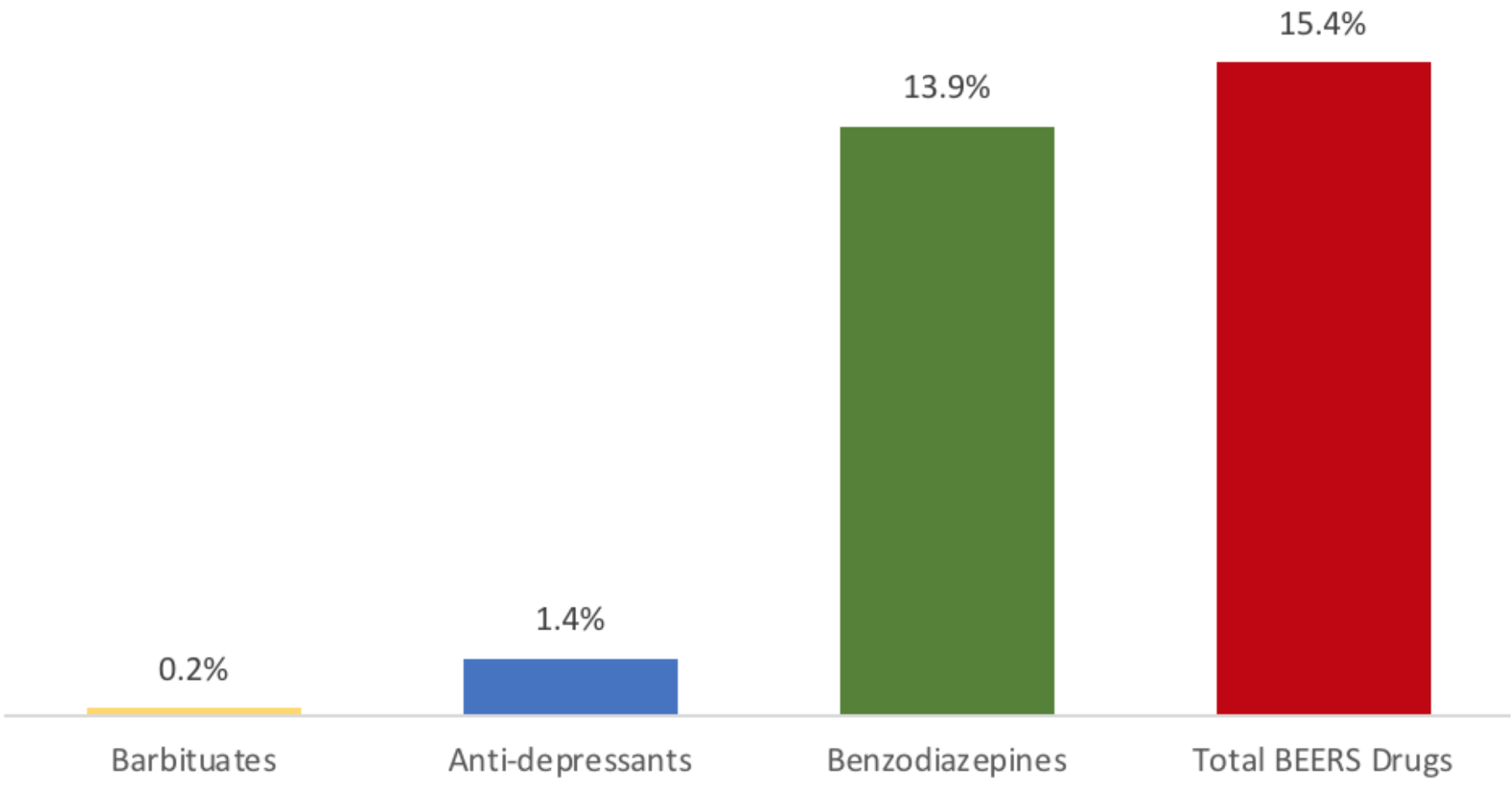

Pre-implementation Hours Patients were Restrained (N=310)
70+ Age during 4/1/2020-3/31/2021 in Adult Hospitals
25,000.00
20,000.00
15,000.00
10,000.00
5,000.00
0.00
Hours patients were restrained while hospitalized
19,197.07
Restraint


Pre-Implementation Number of Orders for Safety Attendants
Age 70+ 6/1/2020-5/31/2021 on 3 Hospital Units
120
100
80
60
40
20
0
Unit #1
Unit #2
Unit #3

Pre-implementation Percentage of Anti-Psychotic Prescribed 70+ Age 7/1/2020-6/30/2021 in Adult Hospitals



Pre-implementation Percentage of BEERs Drugs Prescribed 70+ Age 7/1/2020-6/30/2021 in Adult Hospitals



Strategy #1 & 8: Audit & Feedback Delirium Rate

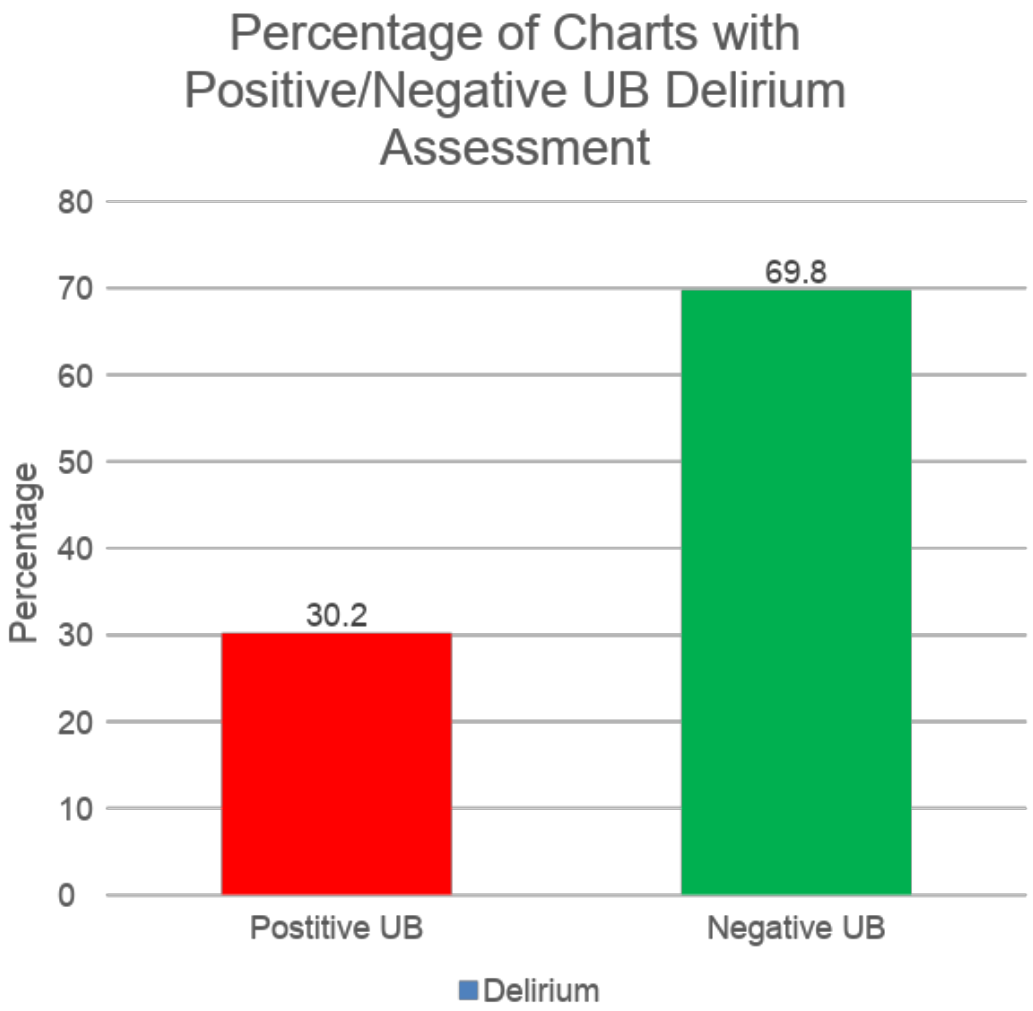
- To establish baseline delirium rate: A manual chart audit was conducted.
  - A clinical nurse specialist and Nurse QI Specialist designed a Standard Work Flow and an Excel data collection tool.
    - Instructed auditors:
      - 3 DNP Students (GVSU KCON) &
      - 2 BSN Students

- 500 patient records (EHR) audited:
  - Age 70+ who had a fall while hospitalized.
  - Years: 2018 and 2019.
    - Conducted prior to COVID:
    - To eliminate missing documentation.
  - Data collected 24-hours prior to the fall occurrence.

- Auditor determined:
  - **Delirium "YES" or "NO".**

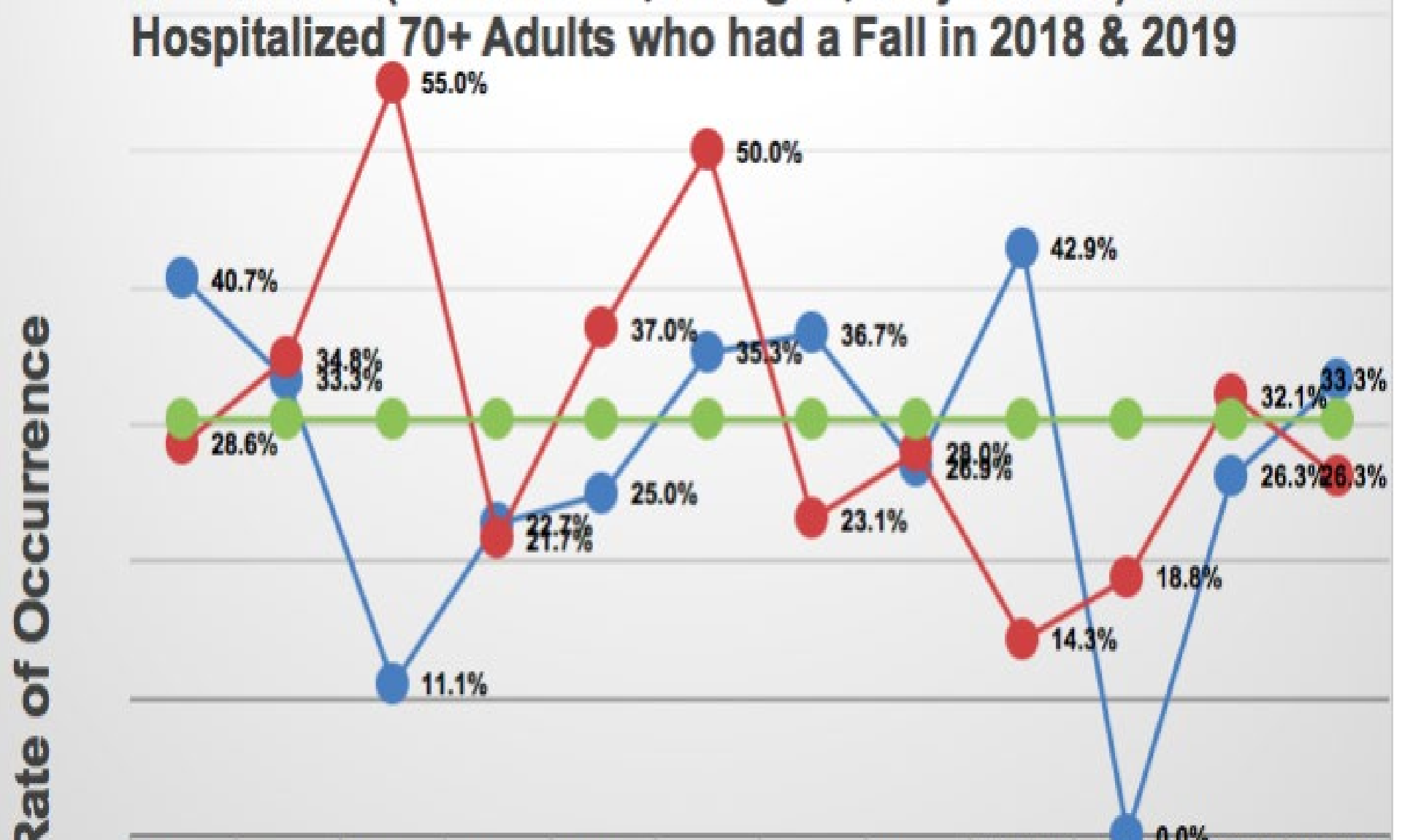
- Used elements of UB-CAM:
  - Pain section: sleep/rest/relaxation.
  - Coping/Psychological section: emotional state.
  - Cognitive section: level of consciousness, arousal, orientation, mood, expression of ideas, understanding commands.
  - RASS section: Richmond Agitation-Sedation Scale.
  - Delirium section: acute onset or not.
  - Behavioral section: documentation.
  - Musculoskeletal section: mobility.
  - Safety section: Hester Davis Fall Risk assessment.
  - Daily care section: glasses and hearing devices.
  - Labs: BUN and Creatine levels.
  - H&P: delirium diagnosis.
  - Hospital Problem List: & Progress notes: documentation.

Delirium Rate



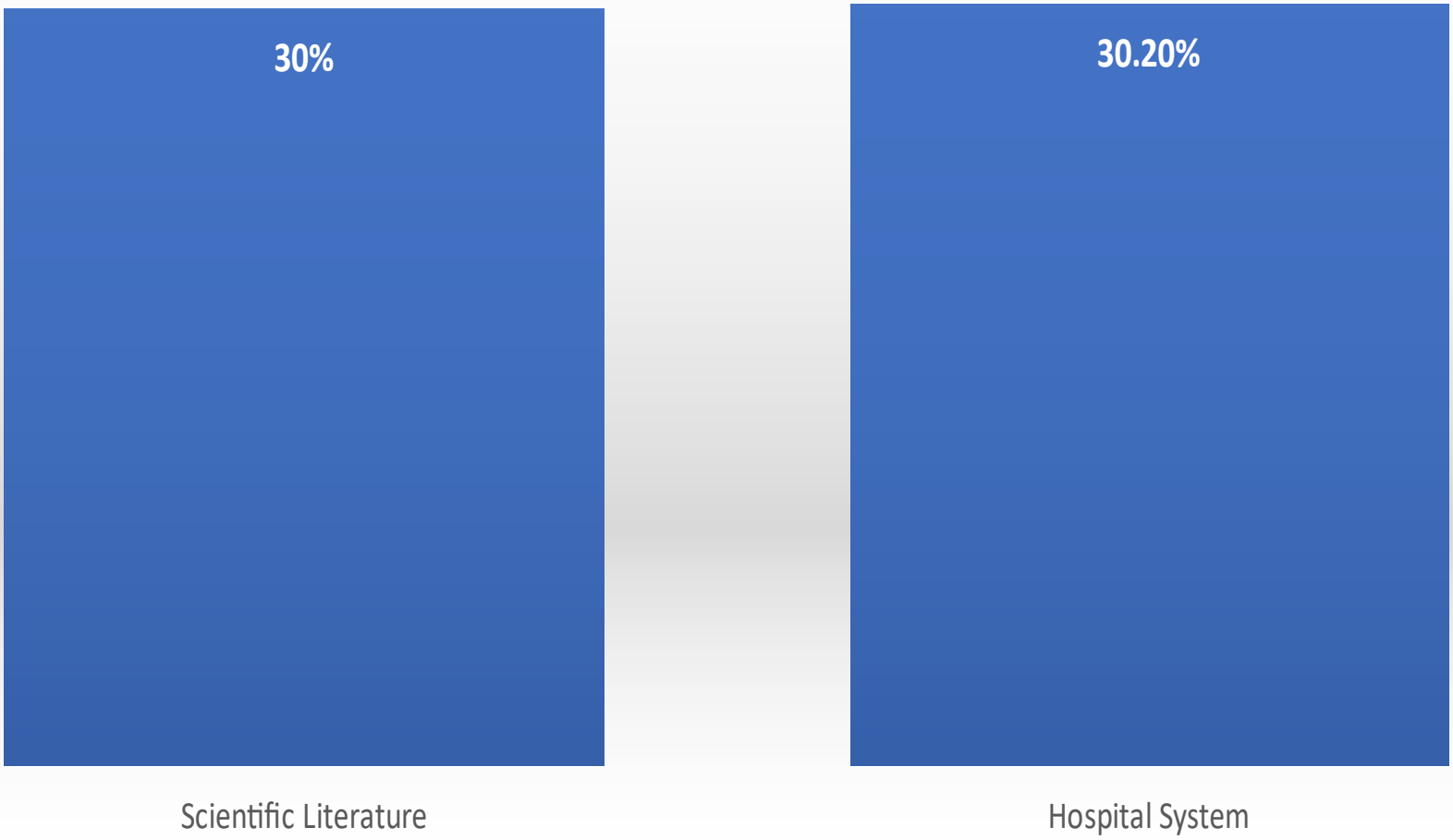
- Average time to audit a record: **13” 7 seconds**
  - Standard Deviation (SD): 5.03.
  - Range: Minimum 5 minutes. Maximum 40 minutes.
  - Large variability in time.
    - Likely due to:
      - Difficulty finding information in the EHR.
      - Quality of documentation.
- Total time to conduct audit = **114.2 hours**

Hospitalized 70+ Adults who had a Fall in 2018 & 2019



	January	February	March	April	May	June	July	August	September	October	November	December
2018	40.7%	33.3%	11.1%	22.7%	25.0%	35.3%	36.7%	26.9%	42.9%	0.0%	26.3%	33.3%
2019	28.6%	34.8%	55.0%	21.7%	37.0%	50.0%	23.1%	28.0%	14.3%	18.8%	32.1%	26.3%
Median	30.40%	30.40%	30.40%	30.40%	30.40%	30.40%	30.40%	30.40%	30.40%	30.40%	30.40%	30.40%

Delirium Rate for Adults Age 70+ who are Hospitalized



Strategy #2:
Stakeholder Engagement

Engaged internal and external stakeholders:

- Interviews.
- Meetings.
- Blog posts.
- Email.
- Coaching calls.
- Written reports.

Strategy #3, 5, 7, 10: Champions, Education, Facilitation, PR

A comprehensive site-specific toolkit was designed as a quick reference for engagement of champions on units when implementing CoCare HELP.

Content:

- Protocol to enact the program.
- Documentation forms.
- Financial forms.
- Patient packet.
- RN b-CAM education.
- Patient/ family survey.
- Hospital System Fliers.
- Hospital System Report.

AGS CoCare HELP

American Geriatric Society (AGS)
CoCare Hospital Elder Life Program (HELP)

Implementation Toolkit

Strategy #4:
Create a Clinical Team

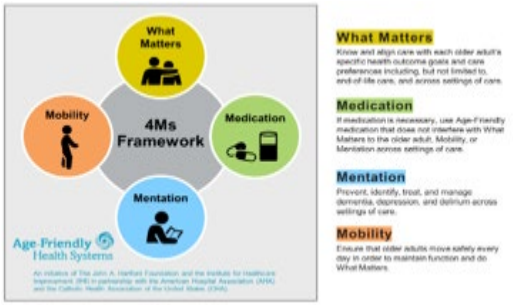
- Site mentor utilized student's project proposal PowerPoint to explain program and the need for FTEs to administration.
- The financial assessment created by students supported the request for FTEs:
  - **1.0 ELNS.**
  - **0.6 ELS.**

Strategy #4 & 5:
Education & Create a Clinical Team

- Met with KCON/CHP Deans/Faculty: 2 times
- Designed elective 2-credit Under graduate course:
  - To train volunteers for clinical team.
    - Site placement (48-hours).
    - Met with simulation experts: 2 times.
    - Consulted with Volunteer Department: Onboarding requirements.
    - Syllabi of Record (SOR) submitted to:
      - GVSU University Curriculum Committee for review
      - KCON Curriculum Committee for review- approved 3/14/22

Products:

- **1** SOR, **1** Syllabi and Course Calendar.
- **43** Lessons & **5** activities created.
- **4** Quizzes & **3** rubrics created.
- **3** Simulation scenarios & **33** activities created.
- **1** practicum hour log created.
- **1** competency checklist with **58** competencies created.



Strategy #5: Education

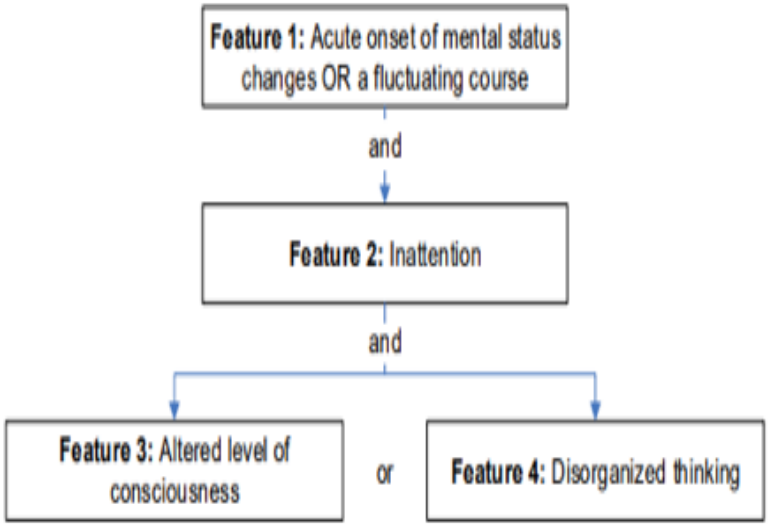
Current Practice:

- CAM-ICU used at all ICUs.
- **NO** screening or required documentation on other units.

Future: RN Education on Delirium & bCAM.

- 1 CE with in-person or online options.
- bCAM: Objective measures with structured cutoffs to screen for the four features of delirium:
  1. Altered mental status or fluctuating course
  2. Inattention
  3. Altered level of consciousness
  4. Disorganized thinking

To be considered delirious, the patient must have positive 1 and 2 features as well as positive 3 or 4 features.



Strategy #5: Education

ELNS/ELS Competency Checklist

- Competency checklist was developed for the ELNS and ELS roles.
- Included:
  - Modules.
  - Forms.
  - Protocol.
- Checklist will guide onboarding.

Strategy #7: Facilitation

- **Internal facilitation:**
  - Students engaged leadership through the site Expert Improvement Team (EIT).
    - **5** EIT meetings attended.
    - **5** updates to the EIT via a written report.
    - **2** interviews with internal experts.
- **External facilitation:**
  - **2** interviews with experts in CoCare HELP.
  - **4** external experts engaged via CoCare HELP blog.
  - **8** CoCare HELP coaching calls attended.

Strategy #8: Audit and Feedback

CoCare HELP Smartphrase
Key: *** to be filled in for each individual patient
() are drop down menus that need to be populated within the smartphrase.

Hospital Elder Life Program
"Preventing Delirium and Functional Decline During Hospitalization"

*** has been screened and enrolled in the **Hospital Elder Life Program (CoCare HELP)** on *** date. They will begin to receive in person, telephonic, or virtual interventions carried out by specially trained volunteers and the Elder Life Specialist that will **help prevent delirium and functional decline** during their hospital admission.

*** is at increased risk of hospital acquired delirium and/or functional decline because of:

- Cognitive impairment as evidenced by the Short Portable Mental Status Exam, attention tasks, or the B-CAM; interventions such as (orientation, therapeutic activities) will be implemented.
- Mobility impairment as evidenced by self-report from the patient and/ or patient care companion. The early mobilization protocol will be implemented to include (ROM exercises, walking with assistance with approval from primary RN and appropriate device (gait belt, cane, front wheel walker)).
- Vision impairment as evidenced by (patient report, need for glasses or other visual aids, difficulty seeing properly). Interventions such as (large print text, lighted magnifying glass provided, visual cues with bright tape on call light and phone, ensuring patient is wearing their prescribed glasses) will be implemented.
- Hearing impairment as evidenced by the whisper test. Interventions such as (ensuring patient is wearing their hearing aids, provided pocket talker hearing amplifier and headphones, speaking slowly and clearly, referral for cerumen disimpaction) will be implemented.
- Dehydration/ poor appetite as evidenced by BUN/Creatinine ration of *** or RN report. Interventions such as (fluid repletion protocol, encouragement of oral intake, feeding assistance and encouragement) will be implemented.
- Sleep impairment as self-reported by the patient and/ or patient care companion. Interventions such as (provide a warm drink, calm music, hand massage, noise and light reduction) will be implemented.

We appreciate your support of the Hospital Elder Life Program and look forward to enhancing your patient's stay. Should you have any questions or concerns please contact our Elder Life Specialist *** at *** or our Elder Life Nurse Specialist *** at ***.

- EHR SmartPhrase template created for documentation by the ELS/ ELNS.
- Smartphrase outlines the interventions implemented by the team and facilitates care coordination.

Strategy #9: Satisfaction

Identified methods for surveying satisfaction:

Press-Ganey Survey:

- Patient Satisfaction Data (TBD).

Glint Survey:

- Staff Satisfaction Data (TBD).

Budget

Budget & Resources: Stage 2a

Cost Mitigation if Delirium is Prevented using CoCare HELP *Pilot*	
Cost per capita saved if one delirium case is prevented	$2,700
Total Cost per capita saved if 264 delirium cases are prevented	**+$712,800**

Income for Implementation Pilot Project	
GVSU Presidential Award	+$1,500
Project Managers (DNP Students; 400-hours each; In-kind)	+$52,500
Total Income	**+$54,000**

Expenses for Implementation of Pilot Project	
EIT members wages/benefits (1hr monthly meeting); QI	-$18,698
RN (43) wage/benefits for b-CAM education (pilot unit)	-$1,881
Total Expenses	**-$20,579**
Cost Savings From CoCare HELP *Pilot*	**+$745,221**

Budget & Resources: Stage 2b

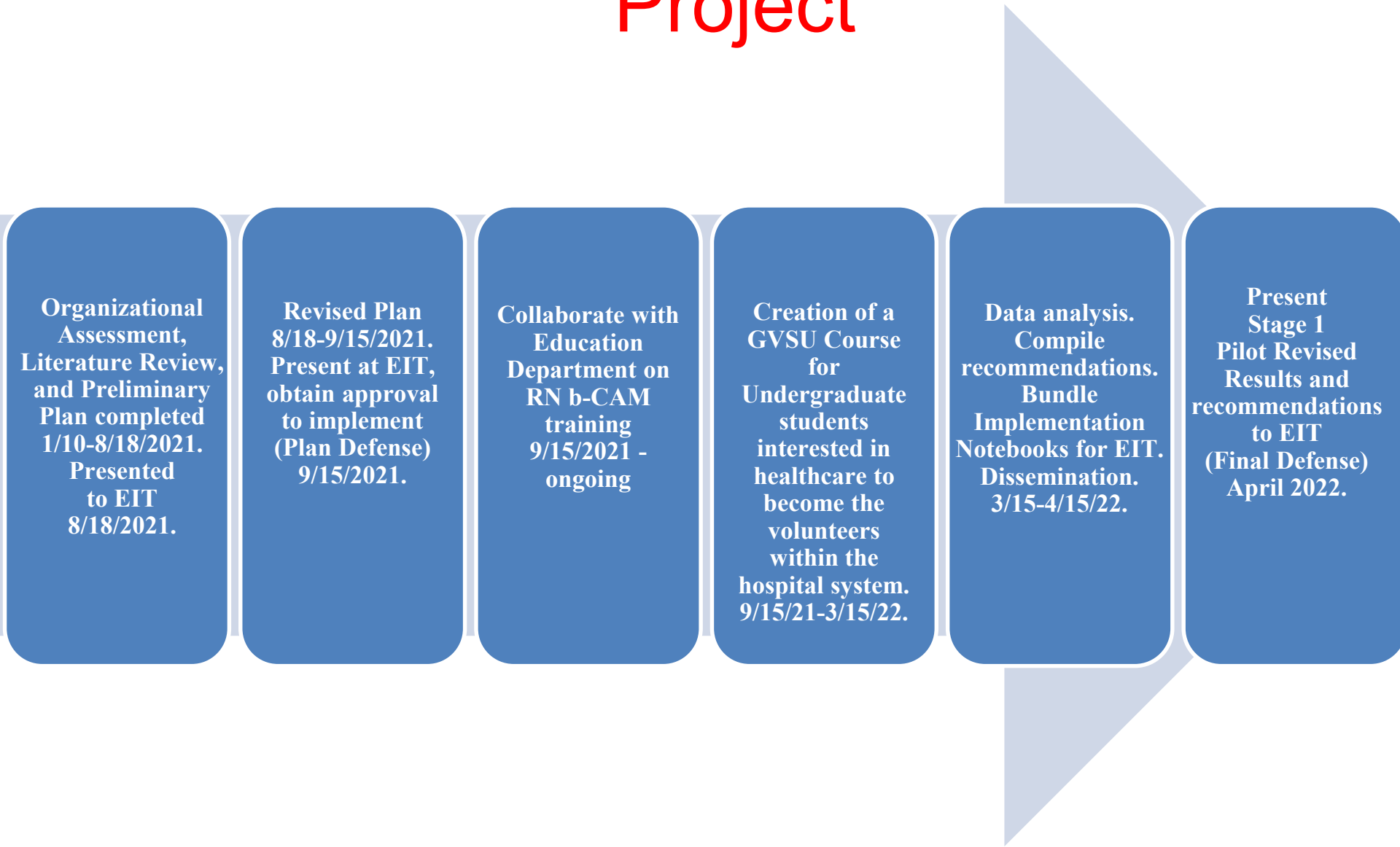
Cost Mitigation if Delirium is Prevented using CoCare HELP	
Cost per capita saved if one delirium case is prevented	$2,700
Annual cost saved if prevent 4,230 cases of delirium on adult units in primary site (not outlying hospitals)	$11,421,000

Expenses for Implementation of CoCare HELP in Adults (Primary Site)	
Lead Staff (Director, Geriatrician, ELNS, ELS)	-$483,850
Patient Supplies ($57/case)	-$241,110
RN wage/benefits for b-CAM education	-$52,500
Total Annual Expenses in primary site (not outlying hospitals)	-$777,460

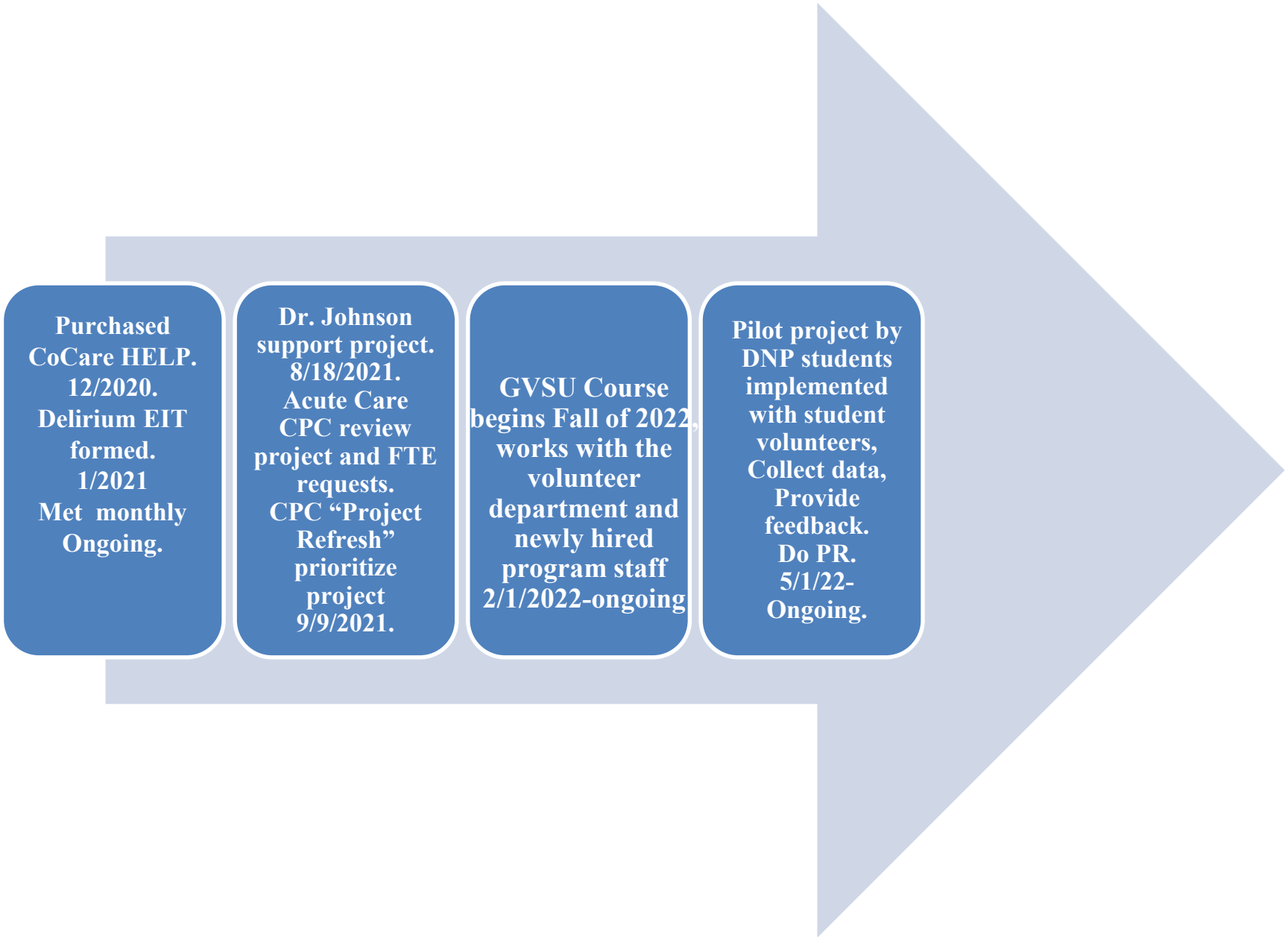
Annual Cost Savings from CoCare HELP in primary site (not outlying hospitals)	**$10,643,540**

Timeline

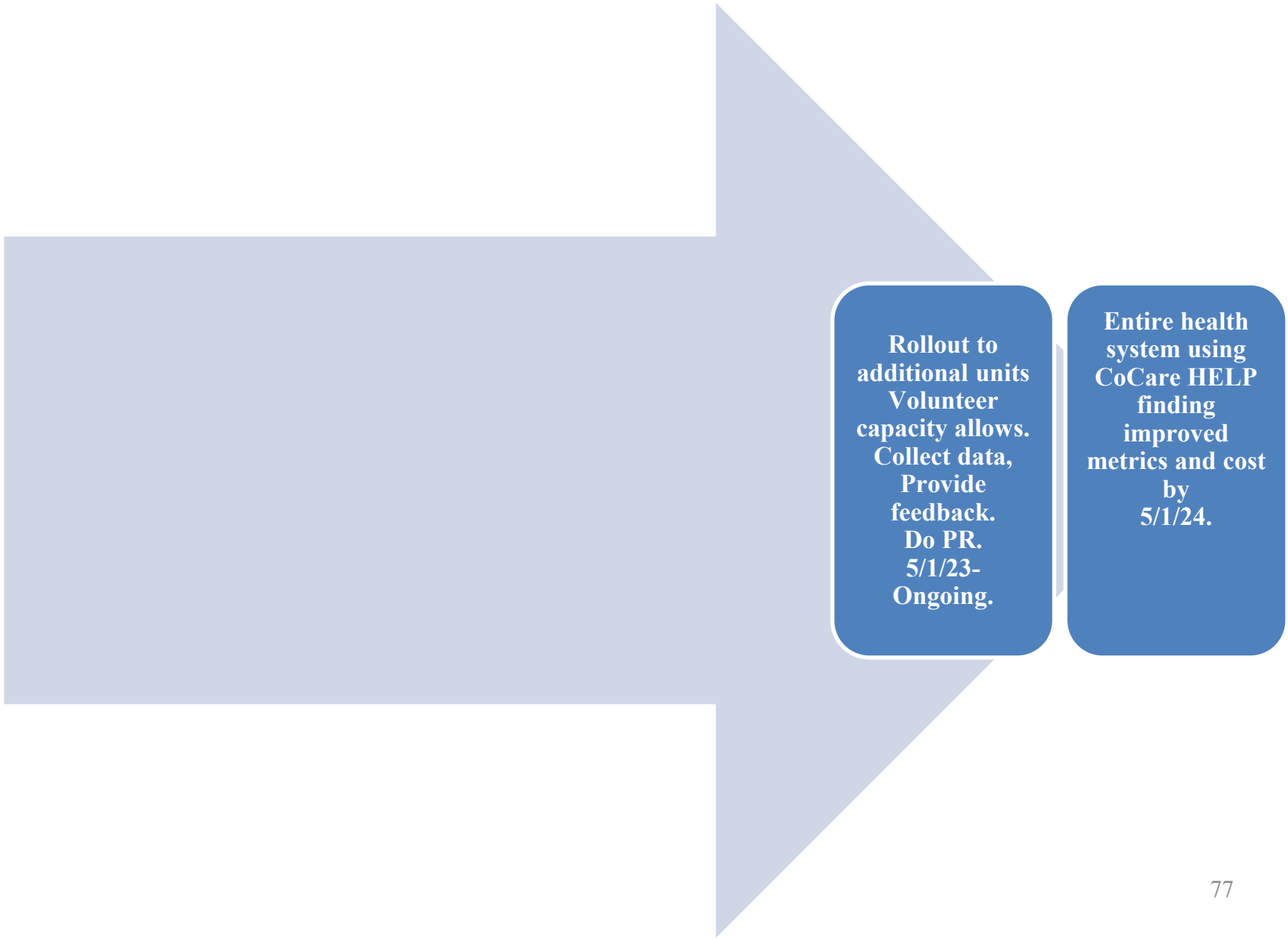
Timeline: Stage 1 Pre-implementation Project



Timeline: Stage 2a Pilot Project



Timeline: Stage 2b Sustainability



Sustainability

Sustainability Plan

According to Ketron (2019) sustainability within a DNP Project can be done through academic-practice partnership and communication.

Stage 1

- CoCare GVSU Course Created.
- Provide recommendations for Pilot Project to the site and new DNP students.
- Bundle in a notebook for implementation on each unit.

Stage 2a/b

- Delirium EIT is committed to CoCare HELP.
- Two DNP 2023 cohort students will continue the project and continue to sustain and expand program with pilot project, then eventual expansion will occur.

Dissemination

Dissemination

- DNP Project Defense:
  April 4, 2022.
- Graduate Showcase:
  April 12, 2022.
- Site Report to EIT:
  April 20, 2022
- ScholarWorks publication:
  April 24, 2022.
- Report to CPC at health system
  April 26, 2022

Summary

Summary

- The organizational assessment supported the need to address delirium system wide.
- Evidence-based implementation strategies (Powell et al., 2015) were identified/recommended for use, guided by CFIR implementation framework (Damnschroder et al., 2009).
-A two-stage implementation plan was revised due to COVID-19:

Stage 1 Revision: Program planning, implementation toolkit, GVSU CoCare Course creation and b-CAM education.

Stage 2: Pilot project to be led by EIT with newly hired ELS/ ELNS and 2 new DNP students, rolling out to other units and outlying hospitals.

-Budget revealed significant cost savings due to CoCare HELP.

*Sustainability will be supported through planning, budgeting, and management with the help of EIT members.

Student Contributions

Autumn	Elizabeth	Thomas
• Organizational Assessment • Literature Review • ELNS/ELS Training • IRB Determination • Presidential Grant Writing • EIT Meetings • Volunteer Meeting • External facilitation via expert interviews (x4) • External facilitation via CoCare Blog posts (x3) • External facilitation via CoCare Coaching Calls (x4) • Creation of a site specific implementation toolkit • 100 delirium rate chart audits • Creation of templates for flyers and quarterly system updates. • GVSU AFHS lesson creation • Plan Defense Information/PowerPoint	• Organizational Assessment: EHR documentation and education training cross-walks • Meeting with education department • Literature Review: PubMed searches, table, search outcomes/results section • ELNS/ELS Training • IRB Determination • Presidential Grant Writing: Methodology, dissemination and timeline sections • EIT Meetings • Volunteer Meeting (x2) • CoCare Coaching Calls • Plan Defense PowerPoint • 100 Chart audits • Annual report creation • GVSU AFHS Course Lead • Manuscript/Final Defense PowerPoint Creation	• Organizational Assessment • Literature Review • ELNS/ELS Training • IRB Determination • Presidential Grant Writing • “Getting Started” Financial Projections • EIT Meetings • Volunteer Meeting • Chart Audits (100) and data consolidation/evaluation • Pilot Study Budget • System-wide Budget • b-CAM education: PowerPoint, handouts, fliers, Standard of Work • Plan Defense information/PowerPoint • Audit and Feedback Templates • Manuscript/Final Defense PowerPoint

DNP Essentials Reflection

DNP Essentials

Essential I: *Scientific Underpinnings for Practice*

Utilized a strong evidence-based tool, aligned it with the 4-M Age Friendly Health Systems movement to bridge the research-practice gap and improve care for the geriatric population at a health system.

Essential II: *Organizational and Systems Leadership for Quality Improvement and Systems Thinking*

Served as leaders within the Delirium Expert Improvement Team to target improvement of care for the geriatric population with a goal of implementing the tool system wide. Used a wide lens to understand the implications of the COVID-19 pandemic on operations, flexed the implementation plan to better prepare the system for future implementation.

DNP Essentials

Essential III: *Clinical Scholarship and Analytical Methods for Evidence-Based Practice*

Critically appraised the evidence to determine the best implementation strategies when preparing for a program pilot, determined appropriate quality metrics and calculated baseline data.

Essential IV: *Information Systems/ Technology and Patient Care Technology for the Improvement and Transformation of Health Care*

Extracted and evaluated data from the EHR to determine baseline data through chart audits. Created template for pilot documentation.

Essential V: *Health Care Policy for Advocacy in Health Care*

Advocated for older adult patients by utilizing CoCare HELP aligned with the Age Friendly Health Systems 4M's to ensure care provided aligns with "What Matters Most".

DNP Essentials

Essential VI: *Interprofessional Collaboration for Improving Patient and Population Health Outcomes*

Collaborated with multiple other disciplines at the health care system: MD, Nursing, Quality Improvement, EIT, Educators, Nurse Managers, Volunteer Department, etc.

Collaborated with KCON and CHS Deans and Simulation Experts for creation of Age-Friendly Health Systems Course.

Essential VII: *Clinical Prevention and Population Health for Improving the Nation's Health*

Program planning completed for CoCare HELP which prevents and improves the older adult population health by preventing delirium and functional decline.

Essential VIII: *Advanced Nursing Practice*

Incorporated advanced nursing practice solutions within the CoCare HELP program as suggested by CoCare HELP and utilized BEERs criteria to align with the Age-Friendly Health Systems "Medications".

Handouts

1. Literature Review: Table of evidence.
2. Measures: Table of system, patient, and implementation strategy measures.

Products:

- Implementation Toolkit.
- bCAM Standard-work.
- Course: Syllabi, SOR, Sim Lab Activities, Rubrics, Quizzes, Activities, Readings.
- ELNS/ELS Competency Checklist.
- EHR Documentation.

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