NYU Langone Health

NYU Langone Hospital—Long Island

Nonpharmacological Interventions and the Importance of Utilizing Volunteers to Cognitively Stimulate the Delirium Patient

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Objectives

To provide companionship, therapeutic activities and conversation to socially and mentally stimulate appropriate patients.

To spend quality time visiting with patients and visitors to promote excellent service delivery.

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Objectives

To provide an understanding of delirium and why it is important to undertake delirium prevention programs in the acute care setting.

How volunteers can be an important tool in preventing and the treatment of delirium in the hospitalized patient.

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Introduction

- Delirium is an medical emergency that needs to be addressed rapidly and appropriately.
- Hospital-acquired delirium (HAD) is a common and dangerous condition that is often overlooked and left untreated, leading to long-term cognitive damage and prolonged hospital stays.

Introduction

- These prolonged stays can result in complications such as pneumonia and blood clots, which can weaken the patient and increase their risk of death within one year.
- HAD is a serious medical problem, and if it's not treated and not addressed rapidly, it can lead to increased morbidity and mortality." (Collier, 2011)

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Causes

The causes of HAD are not fully understood and can vary from patient to patient.

Common causes include:

- -Medications
- -Infections
- -Surgery
- -Dehydration
- -Pain

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summarises the main differences between the two forms of delirium.

Delirium

According to the DSM-5* classification, to be diagnosed with delirium a patient must display all of the following:

Disturbance in attention
Ask patient to name the months of the year backwards

Disturbance in awareness
Ask patient their age, date of birth, place and current year

+ An additional disturbance
Such as defecit in:
- Memory
- Visuospatial ability
- Language
- Perception

Acute change
- Develops over a short period of time
- Sudden change from baseline
- Fluctuates during the course of a day

May require information from other staff, carers, or case notes

No better explanation
These disturbances are not better explained by a pre-existing, established or evolving neurocognitive disorder or coma state

Evidence of cause
Evidence that disturbance is a consequence of one or more of:
- Another medical condition
- Substance intoxication
- Substance withdrawal
- Exposure to a toxin

Hyperactive delirium

Predominantly restless and agitated

- Increased motor activity
- Loss of control of activity
- Restlessness
- Wandering

Mixed motor type

Evidence of both subtypes in the previous 24 hours

Hypoactive delirium

Commonly mistaken for depression or dementia

Predominantly drowsy and inactive

- Decreased activity
- Decreased action speed
- Decreased speed of speech
- Decreased amount of speech
- Reduced awareness of surroundings
- Listlessness
- Withdrawal

Adverse consequences

All types of delirim
- Reduced functional ability
- Onset of dementia
- Increased mortality
- Admission to long term care
- Distress
- Increased length of stay
- Hospital acquired complications
- Pressure sores
- Incontinence
- Falls

Hypoactive delirium
- + Greater mortality
- Less reversibility
- + Greater length of stay
- Worse quality of life
- + Greater frequency of falls

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Recognize to Treat

Delirium Screening

Who is screened?
- Inpatients age 65 and older

Who performs the screening?
- Acute inpatient RN

When is the screening performed?
- On admission and every shift until positive

What tool is used to do the screening?
- UB CAM

What interventions are completed if screen is positive?
- Notify primary provider (launch Delirium order set)
- Implement Delirium Care plan interventions every shift
- Conduct Delirium education every shift

Who is screened?
- All patients

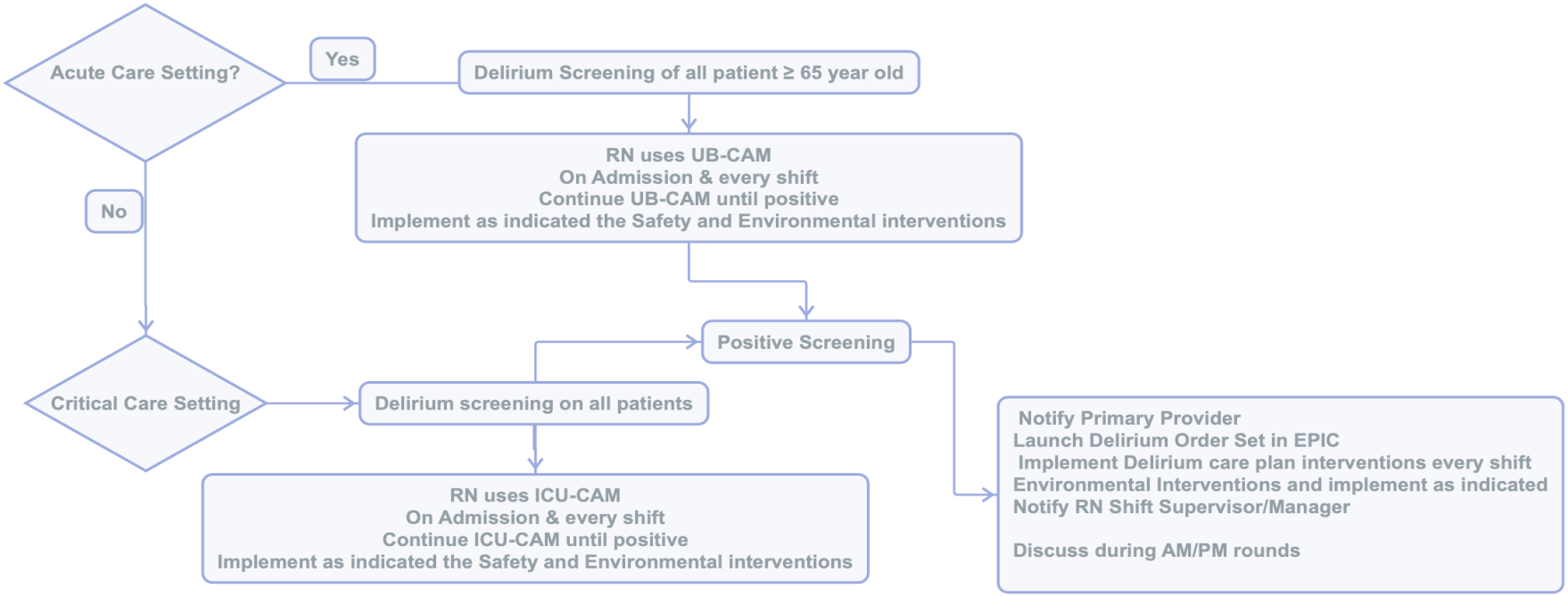
Who performs the screening?
- Critical Care inpatient RN

When is the screening performed?
- On admission and every shift until positive

What tool is used to do the screening?
- CAM-ICU

What interventions are completed if screen is positive?
- Notify primary provider (launch Delirium order set)
- Implement Delirium Care plan interventions every shift
- Conduct Delirium education every shift

Delirium Screening Flowsheet



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Ultra-Brief CAM (UB-CAM)

- Completed in about 1 minute
- Patients with severe lethargy or severe altered level of consciousness are considered delirious, and no further screen necessary.
- If able to participate, the first step is UB-2 screener
  - What is the day of the week?
  - Say months of the year backwards starting with December
- Normal response to both = NOT delirious
- If either is abnormal RN will move on to 3D CAM screen

Ultra Brief Confusion Assessment Method (UB-CAM)		
Is patient severely lethargic or has an altered level of ...		No
Can the patient state the day of week ?		No
Can the patient state the months of the year backwar...		Yes
Confusion Assessment Method (CAM)		
Acute Onset and Fluctuating Course (1A)		Positive
Inattention (2)		Positive
Disorganized Thinking (3)		Positive
Rate Patient's Level of Consciousness (4)		Negative
Delirium Present		Positive

CAM-ICU

Confusion Assessment Method for the ICU (CAM-ICU) Flowsheet

1. Acute Change or Fluctuating Course of Mental Status:

- Is there an acute change from mental status baseline? OR
- Has the patient's mental status fluctuated during the past 24 hours?

NO → CAM-ICU negative NO DELIRIUM

YES ↓

2. Inattention:

- *"Squeeze my hand when I say the letter 'A'."*
  Read the following sequence of letters:
  S A V E A H A A R T or C A S A B L A N C A or A B A D B A D A A Y
  ERRORS: No squeeze with 'A' & Squeeze on letter other than 'A'
- If unable to complete Letters → Pictures

0 - 2 Errors → CAM-ICU negative NO DELIRIUM

> 2 Errors ↓

3. Altered Level of Consciousness
Current RASS level

RASS other than zero → CAM-ICU positive DELIRIUM Present

RASS = zero ↓

4. Disorganized Thinking:

1. Will a stone float on water?
2. Are there fish in the sea?
3. Does one pound weigh more than two?
4. Can you use a hammer to pound a nail?

Command: "Hold up this many fingers" (Hold up 2 fingers)
"Now do the same thing with the other hand" (Do not demonstrate)
OR "Add one more finger" (If patient unable to move both arms)

> 1 Error → CAM-ICU positive DELIRIUM Present

0 - 1 Error → CAM-ICU negative NO DELIRIUM

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DELIRIUM MANAGMENT ALGORITHM

Assess

Intensive Care Unit (ICU) - **CAM-ICU**

Medical Surgical Unit/ED - **Ultra Brief CAM**

NON-PHARMACOLOGIC (ACE) INTERVENTION

DELIRIUM PERSISTS?

NO

YES

ACE INTERVENTION + CONSIDER PHARMACOLOGIC INTERVENTION

- Avoid/Minimize Use of Benzodiazepines/Anticholinergics/Opiates
- Use Acetaminophen PO/IV for Pain if Feasible
- Use Melatonin for Sleep Phase Regulation
- Judicious Use of Low Dose Antipsychotics for Agitation/Psychosis*

ACTIVITY

EARLY AMBULATION

- [ ] PT/OT Consult
- [ ] Out-of-Bed to Chair
- [ ] Proactive Line Removal (Foley/NGT/Leads)

COGNITIVE STIMULATION

- [ ] **Basic:**
  - [ ] Introductory Script
    - *good (morning/evening/afternoon),*
    - *my name is (your name).*
    - *you are in (unit and hospital name) for treatment of (illness) and*
    - *today is (day and date).*
    - *I am here to (your visit purpose).*
- [ ] **Medium**
  - [ ] Mandala/Mindfulness Activities
- [ ] **Advanced**
  - [ ] Puzzles (Crossword/Sudoku)
  - [ ] Board/Card Games

COMFORT

SENSORY CORRECTION/COMMUNICATION

- [ ] Hearing Aid
- [ ] Glasses
- [ ] Interpreter Services/Communication Board to Overcome Language Barrier
- [ ] Temperature and Bedding Adjustment

FEEDING/ELIMINATION

- [ ] Nutrition Consult
- [ ] Ensure Dentures/Dental Comfort
- [ ] Reassess NPO/Dietary Restrictions Daily
- [ ] Assist with Feeding During Meal Times
- [ ] Record Food Intake
- [ ] Encourage Fluid Intake Unless Restricted
- [ ] Every 2 Hour Toileting (Except Quiet Hours)
- [ ] Bladder Scan if No Urine In 8-Hour Period

ENVIRONMENT

SLEEP HYGIENE

Daytime

- [ ] Exposure to Natural Daylight
- [ ] Avoid Caffeinated Drinks After 2PM

Nighttime

Quiet Hours (10PM - 6AM)

- [ ] Turn Off Lights and Media
- [ ] Use Eye Shades
- [ ] Minimize Noise
- [ ] No Non-Urgent Tests/Meds
- [ ] Night Time Vent Settings

FAMILIAR STIMULUS

- [ ] Clock, Updated White Board Every Shift
- [ ] Family Presence if Possible
- [ ] Family Photos
- [ ] Personal Items from Home
- [ ] Personalized Music

LOW DOSE ANTIPSYCHOTIC FOR AGITATION/PSYCHOSIS*

GENERIC NAME	USUAL DOSE RANGE (MG/DAY)	ROUTE	CAUTIONS TO BE OBSERVED		
			EPS SYMPTOMS	QT, PROLONGATION	ORTHOSTATIC HYPOTENSION
HALOPERIDOL	0.25 - 4	PO/IM/IV	+++	++ (MORE WITH IV USE)	+
QUETIAPINE	12.5 - 100	PO	+/-	+++	+++
RISPERIDONE	0.25 - 2	PO/ODT	++	+	++

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Treatment- Order Set

Order Sets

Orders

Clear All Orders

GEN DELIRIUM

Remove Order Sets

Reminders

Reminders

***Delirium is a condition driven by an underlying medical issue and is associated with a significantly elevated risk of morbidity and mortality.** Ultimately, the definitive treatment of delirium involves identification and treatment of all underlying medical etiologies or precipitating factors.

***Please review your patient's medication list for deliriogenic medications, including benzodiazepines, anticholinergics, opioids, and glucocorticoids. Consider whether these can be discontinued or replaced with a nondeliriogenic alternative.**

***Patients with delirium are at higher suicide risk. If patient expresses suicidality or self-injurious behavior, follow nursing protocol "Suicide, Management of the Patient at Risk for" which includes placement of the patient on 1:1 observation, and completion of an environmental safety assessment.**

- link: Suicide, Management of the Patient at Risk for

Vital Signs

Vital Signs

*Reminder: Consider lengthening time between routine vitals to encourage normal sleep patterns (do not wake patient between 11pm – 5am).

☐ Vital Signs
EVERY 4 HOURS WHILE AWAKE

Patient Activity

Activity

☐ Up in Chair
3 TIMES DAILY

☐ Ambulate with Assist

Patient Care

Precautions

☐ Aspiration Precautions
maintain NPO until evaluated. After evaluation If patient is on oral feeds, elevate head of bed greater than 45 degrees during feedings. If patient is on enteral feeds, elevate head of bed 45 degrees during feedings. Reinforce with patient/family recommendations regarding consistency of food textures and strategies for safe feeding. Place visual guide over bedside. Follow documented recommendations of Swallowing Disorder Specialist

☑ Fall Precautions
Routine, CONTINUOUS, Starting today at 0930, Until Specified

Nursing Assessments

☐ Bladder Scan
post void

Nursing Communication

☐ Nursing Communication
***

Nursing Contingency

☐ Notify Physician/NP/PA
***

Therapies

☐ Occupational Therapy Eval and Treat

☐ Physical Therapy Eval and Treat

☐ SLP Eval and Treat

Nutritional Services

Diet

☐ Diet Instructions to Nursing
Assist patient with meals; ensure patient has assistance with feeding during all meals

☐ IP Consult to Nutrition

Medications

Reminders

*Pharmacologic interventions can help manage agitation and/or other severe behavioral symptoms, but will not treat the underlying etiology.

*Avoid using benzodiazepines to manage agitation (unless for alcohol or sedative / hypnotic withdrawal) because these have been shown to worsen or prolong delirium.

*Quetiapine (Seroquel) is preferred in patients with Parkinson's disease or Lewy body dementia.

Pain Management

Consider a multimodal approach to pain management when possible. Both opioids and pain can be independent risk factors for delirium. Consider very judicious use of opioids, if needed, to counterbalance undertreated pain.

☐ acetaminophen (TYLENOL) tablet
1,000 mg, Oral, Every 8 Hours, for 7 days

Additional Pain Therapy

☐ lidocaine (LMX) 4 % cream
Topical, Every 6 Hours PRN, Other, for Procedures including phlebotomy and IV starts, for 30 days, Apply Lidocaine (LMX) to intact, uncleaned skin 20-30 minutes prior to procedures

Pharmacologic Interventions

○ Pharmacologic interventions (patients less than 65 years without critical illness or multiple medical co-morbidities)

○ Pharmacologic interventions (greater than 65 years, frailty, critically ill, or multiple medical co-morbidities)

Treatment

- HAD can be treated with a combination of medications, physical therapy, and psychological support.
- The goal of treatment is to reduce the severity of the symptoms and to prevent the condition from worsening.
- **Nonpharmacological vs. Pharmacological treatment: Who Wins?**

Why Are Volunteers an Important tool in the Prevention and Treatment of HAD?

- According to a retrospective review of the screening of 10,877 eligible records identified 19 studies. In seven studies comparing antipsychotics with placebo or no treatment for delirium
- **Antipsychotic use was not associated with change in delirium duration, severity, or hospital or ICU LOS.**
- Conclusion: Current evidence does not support the use of antipsychotics for prevention or treatment of delirium. (Joshi & Tampi, 2022)

Why Are Volunteers an Important tool in the Prevention and Treatment of HAD?

- *Non-pharmacological interventions for delirium have shown to be more effective in treating delirium than pharmacological interventions.*

  - Volunteers can play an important role in preventing and the treatment of delirium.
  - Volunteers can help keep patients oriented to their environment, provide companionship, and help with activities of daily living. Volunteers can also provide comfort measures such as reading, music, and massage therapy.

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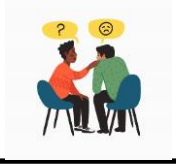
Why Are Volunteers an Important tool in the Prevention and Treatment of HAD?

- Assist in educating staff and other volunteers about delirium and how to recognize it.
- Provide support to caregivers and family members who are dealing with the effects of delirium.
- Assist in training other volunteers in nonpharmacological interventions.
- Assist in reducing the need for medications, to treat their hyperactive delirium which can have side effects or cause further altered mental status changes.

Non-Pharmacologic Interventions

Positive CAM: Provider Notification

Optimal Coping	• Validate feelings & patient response • Monitor for signs of anxiety/depression • Support family & caregivers		• Allow patients to express feelings & response to current situation
Minimize Safety Risk	• Active listening & nonverbal communication • Offer choices & alternatives • Evaluate environment & elopement risk		• Waving is an effective way to establish a therapeutic presence
Agitation Management	• Minimize stimulation & quiet environment • View each interaction as new encounter • Avoid/hide medical devices when possible		• Introduce yourself upon each encounter and reorient the patient as needed
Cognitive Function	• Promote early mobilization • Use of glasses & hearing aides • Encourage consistent routine		• Assist the patient OOB for meals & engaging diversionary activities
Improved Sleep	• Minimize sleep disruption overnight • Limit daytime napping & optimize activity • Provide natural light in day time		• Strategize for uninterrupted sleep by avoiding overnight medication administration

Training of the Volunteers

Centralized Training

Volunteer Services

- General Hospital Overview
- Fire Safety
- Compliance / HIPAA
- Infection Prevention
- Patient Experience

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Department Of Volunteer Services
Cognitive Stimulation & Delirium Program
Training Manual
Table of Contents

I - What is Delirium?
Diagnostic Tools
UB-CAM
CAM-ICU (Critical Care Unit) b-CAM

Management and prevention of Delirium
II - A.C.E. (Non-Pharmacological Management) Protocol Description

Activity
Sunflower Tool
Cognitive Stimulation
Exercise 1 - Mandala
Exercise 2 - Breathing Exercise
Exercise 3- Identify and Describe Objects
Exercise 4- Grounding the Patient in the Present
Exercise 5- Crossword Puzzles
Exercise 6 - Games

Comfort
Sensory correction/communication
Room comfort

Environment
Sleep Hygiene
Familiar Stimulus

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Position Description

Qualifications/Skills Required

- Have an interest or experience in older people or people with dementia.
- Respect for the beliefs, values and culture of others.
- Require minimal supervision.
- Possess interpersonal skills to deal with a variety of people and situations.
- Be able to work independently while seeking guidance when required.
- Use communication and follow-up skills to ensure patient and staff needs are met.
- Use critical thinking skills.

Tasks Performed

- Socialize and regularly touch base with admitted patients, offering items such as crossword, flash cards, coloring sheets, music etc.
- Build a robust and excellent relationship with patients by building trust.
- Listen to patients needs and interpret them accurately.
- Communicate effectively to patient and uphold HIPAA laws and regulations.
- If and when all patients have been seen, ask nursing manager and staff if there are additional patients that would benefit from your services.
- Assist patients with completion of their menus.
- Communicate to the nurse in charge and document any changes that are noticed in the behavior of the patient on the Patient Interaction Report Form.
- Contact Primary Nurse if patient needs help.

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Expectation of Volunteers

•Respect guidelines and duties for role of volunteers; do not infringe on role of staff or become involved in duties for which you have not received training.

• Volunteers are the “friendly face” of NYU Langone Hospital—Long Island . Therefore, please remember that it is not the role to enforce policies – this could put volunteers in a compromising situation – defer to staff.

•Confidentiality of patient information must be maintained at all times.

•Seek assistance from hospital staff if patients have questions.

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At the Start of the Volunteer's Shift

- Report to Nursing Administration for 1:1 sheets
- Check the “Referral Bin” in Volunteer Service Department (_____@nyulangone.org)
- Review prior shift’s visits for follow up actions
- Check-in with the Charge/Primary Nurse for individual visits and for any important patient updates (change in status, isolation, etc.).

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Resources

- Sunflower Tool
- A catalogue of resources to use – a supply of single-use puzzles and coloring sheets
- Facial recognition sheets
- Generational Music
- Flash cards (food and animals)

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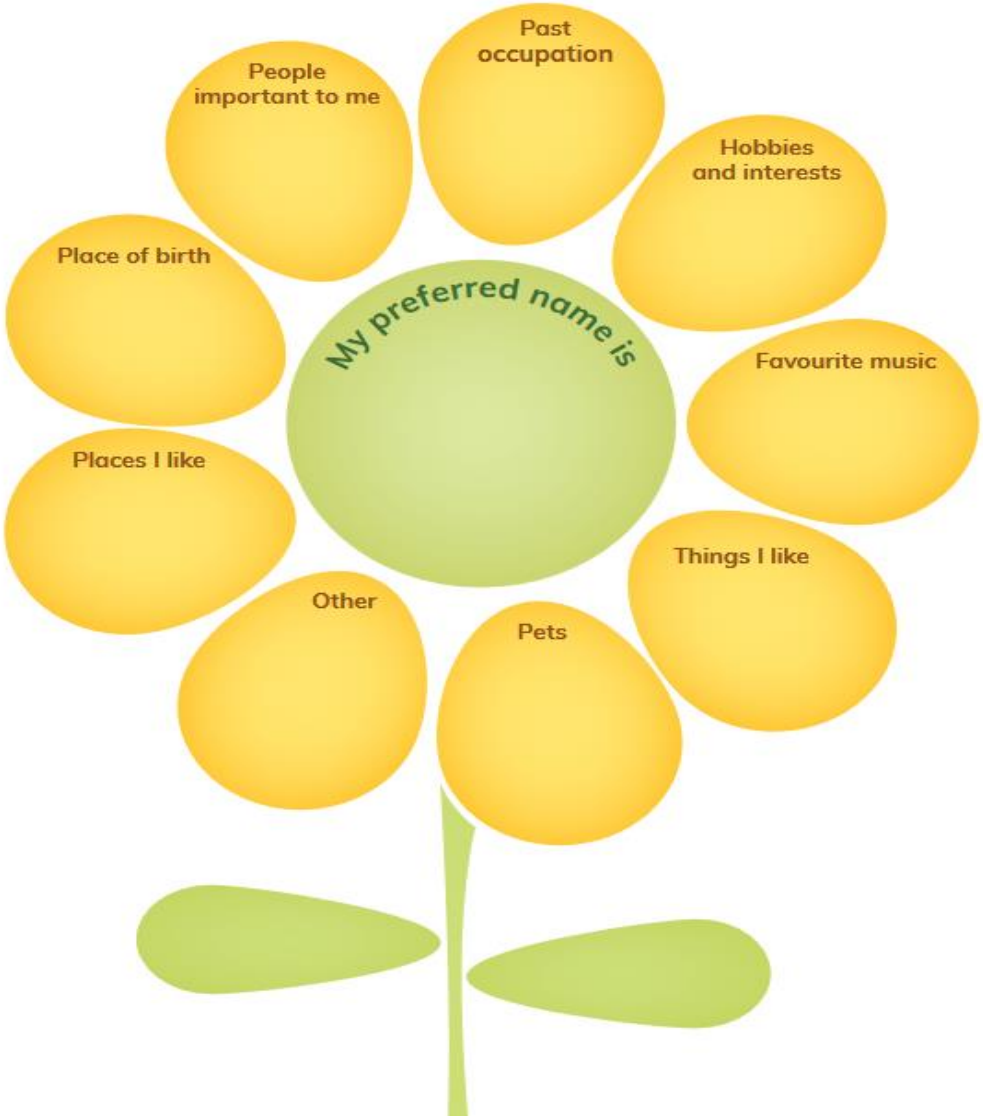
Sunflower Tool



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Resources

Facial Recognition

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Patient Interaction Report

Delirium Prevention			DATE:				
Volunteer's Name:	PATIENT NAME /RM						
Time							
ACTIVITY							
BEHAVIOR							
ACTIONS							
OTHER W/ EXPLANATION							
DIVERSIONAL ACTIVITIES ATTEMPTED:							
NURSE NOTIFICATION:							
Volunteer's Name:	PATIENT NAME /RM						
Time							
ACTIVITY							
BEHAVIOR							
ACTIONS							
OTHER W/ EXPLANATION							
DIVERSIONAL ACTIVITIES ATTEMPTED:							
NURSE NOTIFICATION:							
Volunteer's Name:	PATIENT NAME /RM						
Time							
ACTIVITY							
BEHAVIOR							
ACTIONS							
OTHER W/ EXPLANATION							
DIVERSIONAL ACTIVITIES ATTEMPTED:							
NURSE NOTIFICATION:							
ACTIVITY CODES	BEHAVIOR CODES		ACTION CODES				
A=AWAKE	Y=YELLING		CL=CLIMBING				
SL=SLEEPING	C=CRYING		TH-THREATENING				
AMB=AMBULATING	ET=EXCESSIVE TALKING		P=PULLINGLINES/IVS/TUBES				
	CC=CALM/COOPERATIVE		AC=AGITATED/COMBATIVE				
Diversional Activities: reorient to call bell, person, place and time/			e/ TV/music/family at bedside				

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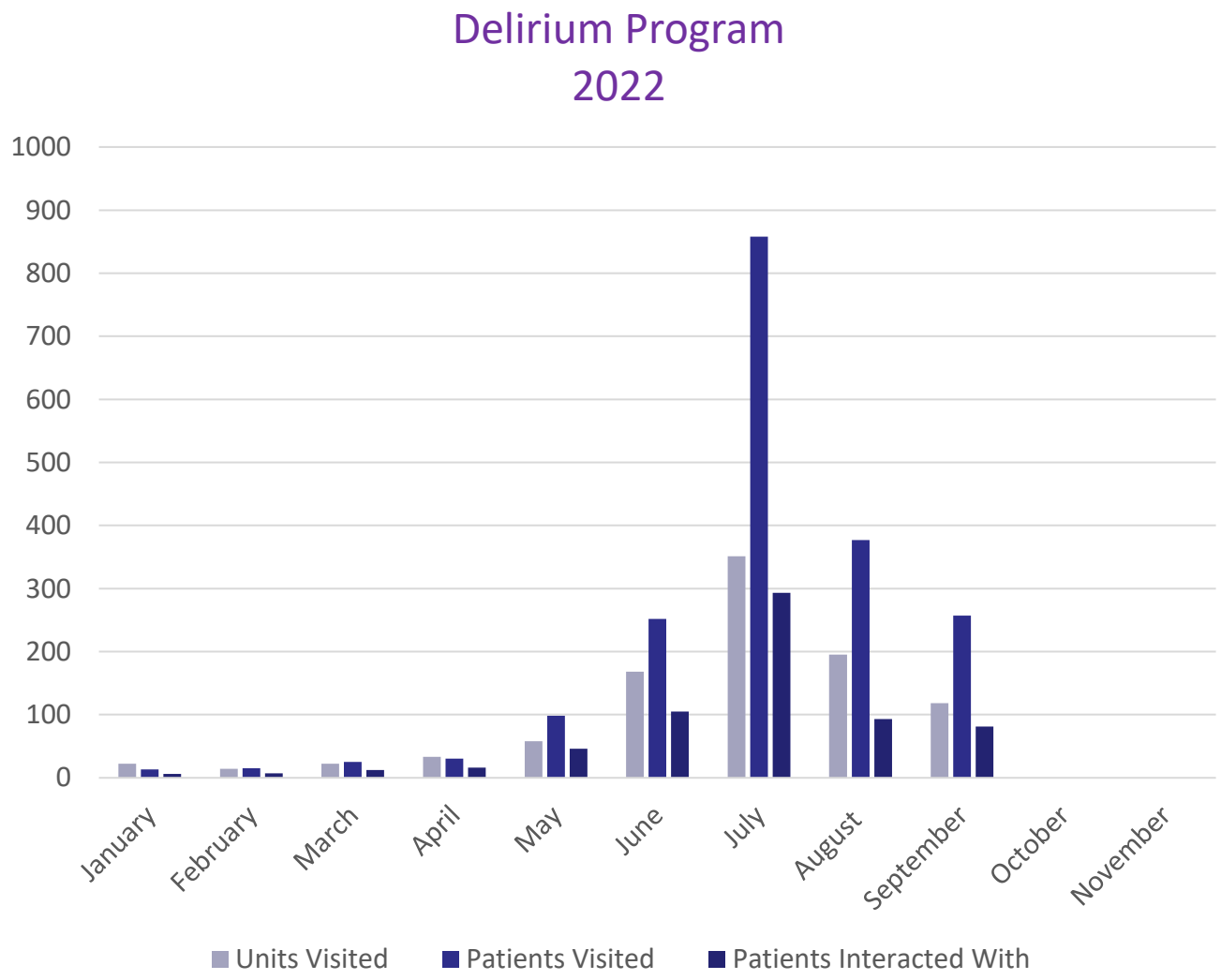
Metrics



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Thank You

We strive to improve as the program continues to grow.

As the program continues to grow, we make changes to benefit our patients and in order for our volunteers to get the most out of their experience.

Feedback from our patients:

- The patient's mother of MR#15698090 wanted to thank the Volunteers for coming to her son, talking with him, and listening.
- The wife and the patient MR# 9589517, reported that playing cards with him and listening to his life stories was very nice.

Feedback from our staff:

- I notice the volunteers working with many patients on 3 Main and doing a very good job.

Please feel free to contact Jean with any questions or for additional information.

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Society for Healthcare Volunteer Leaders

Breakout Session Evaluation