



INTEGRATION OF HEALING ARTS IN THE CARE OF OLDER ADULTS AFTER SURGERY

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TRAUMA AND ACUTE CARE SURGEON

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OVERVIEW

- Older Adults : A special surgical population
- What is delirium and why does it matter?
- Healing arts and surgery : a brief history
- Integrating healing arts into postoperative care here at DH

OLDER ADULTS AND SURGERY

- In 2019, 1 in 7 Americans was 65 years or older.
 - This is the fastest growing age group in the United States
 - By 2060, older adults will account for 25% of the population
- New Hampshire and Vermont already are two of the oldest states in the country
- Patients aged 65 and over account for more than 40% of all inpatient surgery
 - Likely will continue to rise
 - With age comes physiologic and social complexity
 - Older adults are at higher risk for death and complications after surgery

WHAT DO WE DO ABOUT THIS?



**Geriatric
Surgery Verification**
QUALITY IMPROVEMENT PROGRAM

A QUALITY PROGRAM
of the AMERICAN COLLEGE
OF SURGEONS

What is the GSV Program?

The Geriatric Surgery Verification (GSV) Quality Improvement Program aims to systematically improve surgical care and outcomes for older adults by promoting patient and family-centered care, encouraging interdisciplinary input and collaboration, and facilitating implementation of evidence-based practices.

GERIATRIC SURGERY AT DARTMOUTH HITCHCOCK

- Multidisciplinary Team
 - Surgeons
 - Anesthesiologists
 - Geriatricians
 - Psychiatrist
 - Nurses
 - Aging Specialists
 - Community Health Workers
 - Social Workers
 - Case managers



Susan & Richard Levy
Health Care Delivery Incubator
at Dartmouth

GERIATRIC SURGERY AT DARTMOUTH HITCHCOCK

- Identify patients with specific vulnerabilities prior to surgery
- Evaluate additional social and medical factors via phone interview
- Provide recommendations to the surgical / anesthesia teams
- Follow inpatient for support and recommendations as required
- One key component : postoperative DELIRIUM



DELIRIUM

- Delirium is an acute state of confusion / altered level of consciousness
- Older adults who experience delirium have worsened outcomes
 - Death
 - Complications
 - Cognitive Decline
- Recent data in older adult surgical patients :
 - 25% developed delirium
 - \$32.9 billion per year attributable to delirium

DELIRIUM

- What risk factors are there for delirium?
 - Cognitive Impairment / Dementia
 - Certain medical conditions
 - History of prior delirium
- What can cause postoperative confusion?
 - Pain
 - Changes in bowel / urinary habits
 - Complications after surgery

DELIRIUM

- What can we do about it?
 - Prevention
 - Identification
 - Management

DELIRIUM PREVENTION

- Prevention is **KEY** when it comes to delirium
- How do we do it?
 - Returning assistive devices (glasses, hearing aids, etc)
 - Reinforcing orientation (where we are, what day it is, what's going on)
 - Keeping sleep / wake cycle clear
 - Engagement!

HOW DO WE ENGAGE OLDER ADULTS IN THE HOSPITAL?

- Volunteer Program
 - Dedicated volunteers to visit patients
 - Provide activities
 - Just be present, listen, talk
- Spiritual Care
 - Supporting the soul in addition to the body
 - Can incorporate religious beliefs, but does not have to
- Healing Arts!

MUSIC THERAPY IN SURGICAL PATIENTS

Randomized Controlled Trial > J Perianesth Nurs. 2022 Dec;37(6):848-857.e1.

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Music Listening as a Postanesthesia Care Unit (PACU) Nursing Intervention for Laparoscopic Radical Prostatectomy Patients: A Randomized Comparative Clinical Trial

Sylvia Urso¹, Jiangxia Wang², Kelly M Webber², Alexander Pantelyat², Laura Kaiser², Maria Liza Anicoche², Tricia Bulacan², Myrna Mamaril²

Randomized Controlled Trial > J Cardiothorac Vasc Anesth. 2022 Dec;36(12):4341-4346.

doi: 10.1053/j.jvca.2022.09.007. Epub 2022 Sep 9.

Using Music for the Prevention of Delirium in Patients After Coronary Artery Bypass Graft Surgery: A Randomized Clinical Trial

Fatemeh Esfahanian¹, Amir Mirmohammadsadeghi², Hossein Gholami¹, Sina Neshat¹, Mojtaba Mansouri³, Masoumeh Sadeghi⁴, Seyed Roozbeh Bathaie¹, Zahra Heidari⁵, Mohsen Mirmohammadsadeghi⁶

> BMJ Open. 2021 Oct 1;11(10):e048270. doi: 10.1136/bmjopen-2020-048270.

Music to prevent deliriUm during neuroSurgerY (MUSYC) Clinical trial: a study protocol for a randomised controlled trial

Pablo Kappen¹, Johannes Jeekel^{2 3}, Clemens M F Dirven⁴, M Klimek⁵, Steven A Kushner⁶, Robert-Jan Osse⁶, Michiel Coesmans⁶, Marten J Poley^{7 8}, Arnaud J P E Vincent⁴

Review > Cureus. 2021 Sep 29;13(9):e18377. doi: 10.7759/cureus.18377. eCollection 2021 Sep.

Effect of Music Therapy on Pain, Anxiety, and Use of Opioids Among Patients Underwent Orthopedic Surgery: A Systematic Review and Meta-Analysis

Nidhi Patiyal¹, Vasantha Kalyani², Rakhi Mishra², Neetu Kataria¹, Suresh Sharma³, Anil Parashar⁴, Poonam Kumari¹

> Front Pharmacol. 2021 Sep 30;12:748296. doi: 10.3389/fphar.2021.748296. eCollection 2021.

Efficacy of Preoperative Music Intervention on Pain and Anxiety in Patients Undergoing Cataract Surgery

Gilles Guerrier¹, Federico Bernabei², Mathieu Lehmann², Marco Pellegrini³, Giuseppe Giannaccare⁴, Pierre-Raphaël Rothschild^{2 5}

Randomized Controlled Trial > Trials. 2022 Jul 19;23(1):576. doi: 10.1186/s13063-022-06448-w.

Decreasing delirium through music listening (DDM) in critically ill, mechanically ventilated older adults in the intensive care unit: a two-arm, parallel-group, randomized clinical trial

Sarah Seyffert^{# 1}, Salwa Moiz^{# 2}, Matthew Coghlan^{# 3}, Patil Balozian⁴, Jason Nasser⁴, Emilio Abi Rached⁴, Yasser Jamil⁴, Kiran Naqvi², Lori Rawlings², Anthony J Perkins⁵, Sujuan Gao⁵, J Downs Hunter 3rd⁶, Sikandar Khan^{2 7}, Annie Heiderscheid⁸, Linda L Chlan^{# 9}, Babar Khan^{# 2 7}

> BMJ Open. 2021 Oct 28;11(10):e051878. doi: 10.1136/bmjopen-2021-051878.

Implementation of music in the perioperative standard care of colorectal surgery: study protocol of the IMPROVE Study

Ellaha Kakar^{1 2}, Erwin Ista^{2 3 4}, M Klimek⁵, Johannes Jeekel^{6 7}

ART THERAPY IN MEDICAL LITERATURE

Randomized Controlled Trial > [Ann Surg.](#) 2021 Aug 1;274(2):264-270.

doi: 10.1097/SLA.0000000000004059.

Art Heals: Randomized Controlled Study Investigating the Effect of a Dedicated In-house Art Gallery on the Recovery of Patients After Major Oncologic Surgery

Zaeem Lone ¹, Ahmed A Hussein ¹, Hijab Khan ¹, Morgan Steele ¹, Zhe Jing ¹, Kristopher Attwood ¹, Joe Lin-Hill ², Russell Davidson ², Khurshid A Guru ¹

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PAINT I: the effect of art therapy in preventing and managing delirium among hospitalized older adults in the PAINT I study—a proof-of-concept trial

Singler Katrin ^{1 2}, J Masuch ^{3 4}, S Lim ⁵, B Habboub ³, M Gosch ³

Randomized Controlled Trial > [Psychooncology.](#) 2013 Feb;22(2):330-7. doi: 10.1002/pon.2093.

Epub 2011 Dec 6.

'Open Window': a randomized trial of the effect of new media art using a virtual window on quality of life in patients' experiencing stem cell transplantation

Catherine McCabe ¹, Denis Roche, Fran Hegarty, Shaun McCann

HOW DID IT START?

July 21, 2021



Happy Monday

Do you have a patient who is anxious, lonely, bored? Our amazing creative arts team can help them, and you, by working with them to process their experience here in the hospital.

Please e-mail Creative.Arts@hitchcock.org to make your referrals and include the patient's name and room number as the team does not have access to eD-H. They are available to provide writing/poetry, music and art in person and virtually. Kim, our visual artist is available for art & mindfulness exercises. Marv our writer is available for writing, story telling, letter and memoir writing. Margaret our harpist is available to provide soothing or uplifting music to calm or brighten your patients' day. They are all available for compassionate listening. The Virtual Visit Program can assist with technology and connecting patients with our team for virtual visits as well.

As always, if you need to connect with us, please e-mail Creative.Arts@hitchcock.org and share the attached flier with your colleagues and patients.

Have a great week!

-Marianne

Hello,

We have a program for older surgical patients and we definitely want to connect with you. Do you want to hear more about the program ? Or should we just make referrals?

Thank you.

Best,

Stacie

Both! Let's set up a time to discuss but also send us any folks you think could benefit.

-Marianne

INTEGRATING HEALING ARTS AT DHMC

- Use of the Electronic Medical Record (EMR) to create a list of eligible patients
- List distributed to Healing Arts program
- Visits recorded through REDCap submission

THE HEALING ARTS TEAM



Jeremy Ajani Jordan
Pianist

<https://jeremyajanijordan.com/>



Kim Hall
Artist-in-Residence

Martha Clark
Volunteer



Margaret Stephens
Therapeutic Harpist



Majorie Gellhorn Sa'adah
Writer

PROJECT MUSIC HEALS US

 PROJECT: MUSIC HEALS US

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VITAL SOUNDS INITIATIVE

VIRTUAL BEDSIDE CONCERTS



2,187
Concert Sessions
Performed

266
Musicians
Supported

14,324
Individual
Patients Reached

<https://www.pmhu.org/vital-sounds>

HEALING ARTS VISITS

D-H CARES Visit Tracking

AAA
+

Please complete the data entry form below. Don't forget to hit "submit."

Thank you!

MRN:
* must provide value must include dash (#####-#)

Patient Name:

Date of hospital admission: M-D-Y
Leave blank if you aren't certain

Date of CARES visit: M-D-Y
* must provide value Visit date is important for data linking purposes

Type of CARES visit?

- Healing Arts
- Volunteer
- Visit Declined or Patient Not Available

INITIAL PILOT

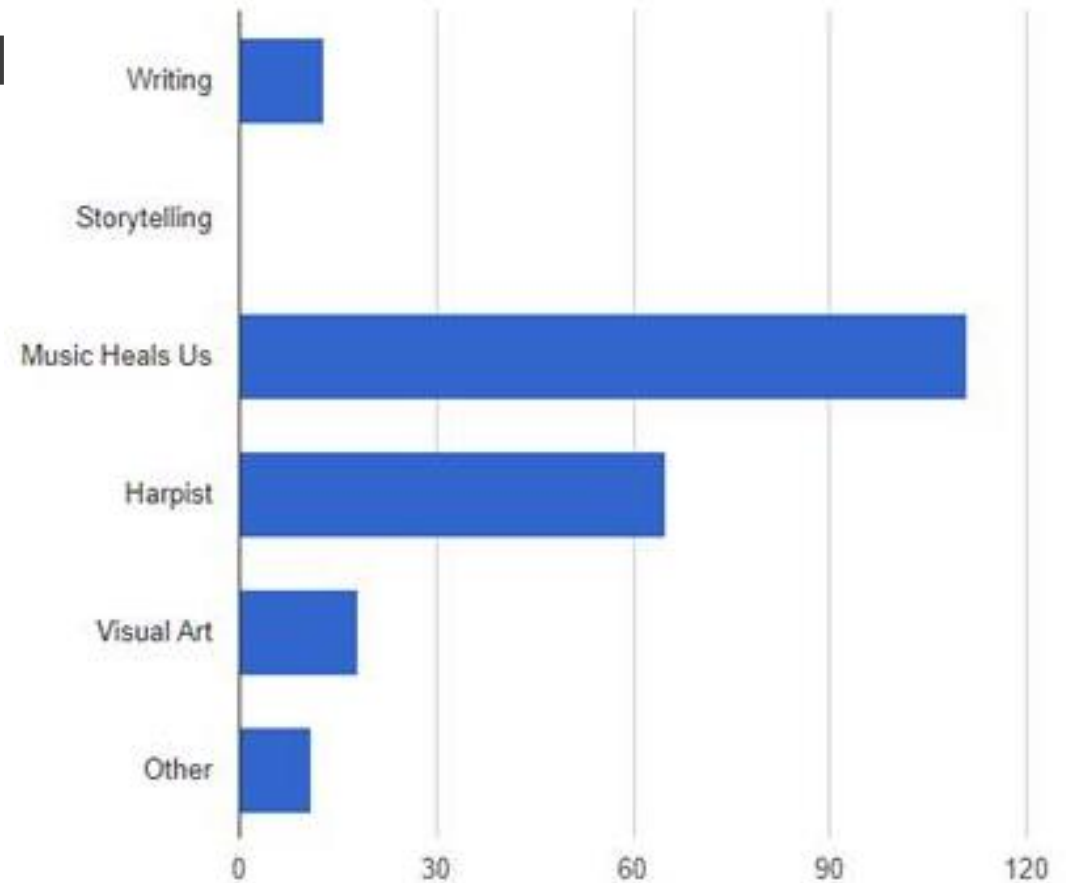
- Three month pilot on one inpatient unit :
 - 88 visits attempted for 45 patients
 - 40 (45.5%) visits were successful
 - 25 patients (55.6%) reached
 - Types of visits :
 - 22 in-person harpist visits
 - 10 virtual concerts via iPad
 - 7 visual arts visits
 - Multiple visits for 10 patients (22.2%)
- 48 unsuccessful visits:
 - 12 patients asleep (48%)
 - 10 declined (20.8%)
 - 8 not in room (16.7%)
 - 7 on precautions (14.6%)
 - 5 busy (10.4%)
 - 6 unknown (12.5%)

THE PATIENT EXPERIENCE

- “I asked him if he wanted me to continue to play for him and he indicated that he did. When I had to leave he invited me to come back. It was interesting to see how his attention focused and we were able to communicate.”
- “His wife said it was the most relaxed she had felt during his whole hospital stay.”
- “XXX was somewhat agitated and a bit confused when I arrived but the music settled him.”
- “A few classical pieces were played, and then some music from when the patient and her husband would’ve been in their teens and twenties. The husband reported that was the most awake he had seen his wife in a while.”

FURTHER EXPANSION FY2022 AND 2023

- 433 attempted visits, 218 completed (50%)
 - Music Heals Us (50.9%)
 - Harpist (29.8%)
 - Visual Arts (8.3%)
 - Writing (6.0%)
 - Other (5.0%)
- Median time of visit : 15 minutes



THE PATIENT EXPERIENCE

- Patient was in a double room and both patients wanted to hear a concert. "I could have listened to that all day."
- Patient sings with a choir and loves music. He found it so nice that Jeremy played music for him and other patients.
- Patient appreciated the concert. She likes to hear music in the hospital.
- He was non-communicative but seemed to enjoy it. His family arrived and was so happy he had music.
- She was thrilled! She used to own a jazz club. One of her dreams was to lay in bed and have musicians play for her. It made her day! She was miserable before. She couldn't wait to call her friend and tell her.

THE PATIENT EXPERIENCE

- Patient asked for Chopin. Jeremy played Chopin for 20 minutes. The patient said the music and the program is "fabulous".
- Enjoys any kind of music. Face lights up when told someone will play for him.
- "couldn't pass up this opportunity"
- She was "very impressed". "What a pleasant surprise!"
- She loved it! She kept saying "He's so talented!" The nurses noted how much she was smiling.

TAKEAWAY POINTS

- Increasing numbers of surgical patients are 65 and older as the American population ages
- Geriatric patients are at higher risk for death and complications after surgery
- Delirium is a costly complication that worsens patient outcomes
- Prevention and management of delirium is essential
- Integration of healing arts into postoperative care is feasible and incredibly valuable
- We need to do more to integrate healing arts into hospital care!

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 - Martha Clark
 - Jeremy Ajani Jordan



THANK YOU