



Association of an Emergency Department Care Transition Program with Healthcare Outcomes Among Older Veterans

Colleen M. McQuown, Louis Stokes Cleveland VA Medical Center

Kristina T. Snell, Office of Primary Care, U.S. Department of Veterans Affairs

Lauren M Abbate, Rocky Mountain Regional VA Medical Center

Luna C. Ragsdale, Durham VA Health Care System

Sunah Song, Case Western Reserve University, Louis Stokes Cleveland VA Medical Center

Tongyezhi Sheng, Case Western Reserve University, Louis Stokes Cleveland VA Medical Center



No Financial
Disclosure






National Geriatric Emergency Medicine

Mission

Enhancing geriatric-focused care in VA emergency departments throughout the nation via education, standardization, environmental enhancement, and promotion of a comprehensive care model



What can we do to support the
Geriatric EM Mission after ED
discharge home? SCOUTS

Supporting
Community
Outpatient
Urgent Care &
Telehealth
Services

Intermediate Care Technician (ICT)

Intermediate Care Technician (ICT) - ICTs are advanced unlicensed assistive personnel (UAP) who have graduated from intensive specialized military medical training programs and served as combat medics, medical technicians, and corpsman. This role provides a higher level of clinical support to both nursing and medicine.



Program Mission and Vision - The ICT Program is designed to (1) allow ICTs to function in a health care role commensurate with their military education, training and experience without the need for a license or additional credential; (2) enhance quality of care and patient satisfaction among Veterans in multiple clinical settings and; (3) enable a path for ICTs to attain licensed professional roles through advanced education and clinical opportunities for long-term VA employment.

Methods

- Eligible: Older adults in the ED identified as high risk and discharged home
- **Intervention: 48-72 hour follow up home visit with SCOUTS ICT**
 - GED screens
 - Social Determinants
 - Identify What Matters
 - Facilitate telemedicine visits for post ED follow up
 - Coordinate with GED providers to implement action plan to address needs



Methods

- Six VA EDs in pilot program (5/15/21-5/31/22)
- **Propensity score matching**
 - ESI:1,2,3,4,5 (Exact match)
 - CAN score : 0 ~ 99
 - Age : continuous
 - Gender : Male, Female
 - Hospitalized in prior 30 days : Yes, No (Exact match)
 - Treated in ED in prior 30 days : Yes, No
- **Propensity score matching**
 - Admitted in 24hr : Yes, No (Exact match)



BEFORE Matching SCOUTS Group vs +65ED Group

- ED patients N= 29,067
- SCOUTS N=684
- Older (mean 78.51 vs 74.35)
- More Frail (CAN Score higher 82 vs 72)
- More likely to have been in the ED in the past 30 days (20% vs 0.8%)
- More likely to have been hospitalized in the past 90 days (17% vs 5%)



Matched Resulted

- ▼ Admit from ED (3.5 vs 21.2%)
- ▼ 30 d inpt admission (11.7 vs 26.9%)
- ▼ 90 d inpt admission (20 vs 32.5%)
- ▼ 72-hour ED revisit (1.8 vs 3.9%)
=30 d ED revisit (21.9 vs 21.6%)



Matched for Admit Status-Discharged

▲ Increased Orders for Durable Medical Equipment (50.7 vs 34.7%)


▲ Increased Referrals to VA Social Work (15.6vs 10.8%)

▼ Decreased 72 hour ED Revisit (2.5 vs 5.2%)



SCOUTS

- Novel Role for former Military Medics and Corpsman
- Post ED transition program for frail older adults at high risk for admission and ED revisits
- Avoid hospitalization without increasing 30 day admissions and revisits
- Decreased 72 hour ED revisit
- Home visit + telehealth check increases referrals to VA services



To learn more about the ICT program or SCOUTS,
contact the ICT program office at
Kristina.snell@va.gov
colleen.mcquown@va.gov



U.S. Department of Veterans Affairs
Veterans Health Administration
VA Northeast Ohio Healthcare System

BEFORE Matching : SCOUTS Group vs +65ED Group

	ED	SCOUTS	p
n	29067	684	
ED: Age (mean (SD))	74.35 (6.94)	78.51 (9.02)	<0.001
Gender (%)			0.221
Female	1328 (4.6)	24 (3.5)	
Male	27739 (95.4)	660 (96.5)	
Race (%)			0.003
Black	6959 (23.9)	141 (20.6)	
White	19212 (66.1)	496 (72.5)	
Other	1408 (4.8)	21 (3.1)	
Unknown/Missing/Declined	1488 (5.1)	26 (3.8)	
Ethnicity (%)			0.007
Hispanic or Latino	1933 (6.7)	31 (4.5)	
Not Hispanic or Latino	25035 (86.1)	618 (90.4)	
Unknown/Missing/Declined	2099 (7.2)	35 (5.1)	



BEFORE Matching : SCOUTS Group vs +65ED Group

	ED	SCOUTS	p
n	29067	684	
Prior 30 days ED visit = Yes (%)	224 (0.8%)	137 (20.0%)	<0.001
Hospitalized in Prior 30 days = Yes (%)	457 (1.6%)	61 (8.9%)	<0.001
Hospitalized in prior 90 days = Yes (%)	1310 (4.5%)	113 (16.5%)	<0.001
CAN score (mean (SD))	71.78 (24.22)	81.89 (20.45)	<0.001
ESI (%)			<0.001
1	69 (0.2)	0 (0.0)	
2	5430 (18.7)	75 (11.0)	
3	15042 (51.7)	431 (63.0)	
4	7914 (27.2)	168 (24.6)	
5	612 (2.1)	10 (1.5)	

Matched Results

		Matched Controls	SCOUTS	Odd Ratio (CI)	P-value
↓	Admission from ED (%)	173/684 (25.3%)	24/684 (3.5%)	0.09 (0.05,0.16)	<0.001
↓	30 d inpatient admission (%)	205/684 (30%)	80/684 (11.7%)	0.29 (0.21,0.39)	<0.001
↓	90 d inpatient admission (%)	250/684 (36.5%)	137/684 (20%)	0.42 (0.32,0.54)	<0.001
↓	72-hour ED revisit (%)	28/684 (4.1%)	12/684 (1.8%)	0.43 (0.22,0.84)	0.0141
	30 d ED revisit (%)	138/684 (20.2%)	150/684 (21.9%)	1.11 (0.86,1.44)	0.427



Matched Resulted-Matched for Admit Status-Discharged

	Matched Controls	SCOUTS	Odd Ratio (CI)	P-value
30 d inpatient admission (%)	49/659 (7.4%)	56/659 (8.5%)	1.16 (0.78,1.72)	0.47763
90 d inpatient admission (%)	107/659 (16.2%)	113/659 (17.1%)	1.07 (0.8,1.43)	0.65656
72 hour ED revisit (%)	34/659 (5.2%)	10/659 (1.5%)	0.29 (0.15,0.6)	0.00067
30 d ED revisit (%)	144/659 (21.9%)	143/659 (21.7%)	0.99 (0.75,1.31)	0.94377
Physical Therapy	106/659 (16.1%)	128/659 (19.4%)	1.25 (0.94,1.65)	0.1187
Prosthetics	229/659 (34.7%)	334/659 (50.7%)	1.94 (1.54,2.43)	< 0.0001
Social Work	71/659 (10.8%)	103/659 (15.6%)	1.53 (1.11,2.12)	0.01



Scouts Program



Scouts Scope of Practice



Scouts Training guide



Scouts CPRS note



Competencies for each screen and
homecare task



Playbook



Medical Director Role Defined



Planned data analysis and continues
PDSA program evaluation

Current and onboarding sites

Dallas – (Pending) Level 1

Durham – Level 2

Grand Junction – Level 3

Palo Alto – Level 3

Salt Lake City – Level 3

San Diego – Level 2

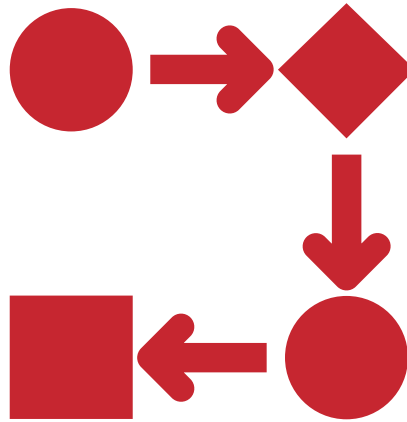
Syracuse – Level 2

Louisville – Level 2

Fayetteville – Level 3



What does
our SCOUTS
flow look
like?



- ☐ Problem Summary List (note related Geriatric syndromes and/or functional decline Dx)

Note: If NO RECORDS in CPRS check JLV

☐ **Review Behavioral Flags or Alters**

- ☐ Medications (10+ medications, high risk medications, non-VA medications, medication non-compliance)

Note: Print-out Medication List

- ☐ Last Primary Care Appointment
- ☐ Last Mental Health Appointment
- ☐ Last Social Work Appointment/Note
- ☐ Advance Directives
- ☐ Goals of Care
- ☐ Pending Lab orders

☐ **Past Consults/Resources**

- Home Based Primary Care (HBPC)
- Home Health Aid (HHA)
- Physical/Occupational Therapy (PT/OT)
- PMRS Mobility
- Adult Day Health center (ADHC)
- Caregiver Support Program
- Ethics
- Specialty; Optometry; Audiology; Blind Rehab
- HISA Grant
- Nutrition

SCOUTS CHART REVIEW

☐ **Durable Medical Equipment (DME)**

- Tele-Technology (issued iPad or other)
- ADL assistive devices
 - Sock Aid
 - Transfer Bench
 - Bath Lift
 - Raised Commode
 - Rollator / Walker / Cane
 - Hearing Amplifier + Headphones

Pre-Home Visit

☐ Chart Review (page 2)
 ☐ Telephone Screening Prior to visit

☐ Covid screen
 ☐ Provide Program Explanation and reason for visit
 ☐ Confirm date and time of home visit, address and phone

“Now I am going to ask you a few questions regarding basic information about your home environment”

☐ Do you live alone yes / no
 ☐ Do you have a caregiver/family/roommate and that will be present Yes / no

☐ Do we (VA) have permission to speak with them yes/no
 ☐ Name (s)_____

☐ Now or in the past six months have you had any problems with bedbugs, cockroaches, rats in your home? Yes / no
 ☐ Do you have any pets? Yes / no

☐ We require that pets (excluding service animals) be place in another room during home visits. Do you agree to do this? Yes / no

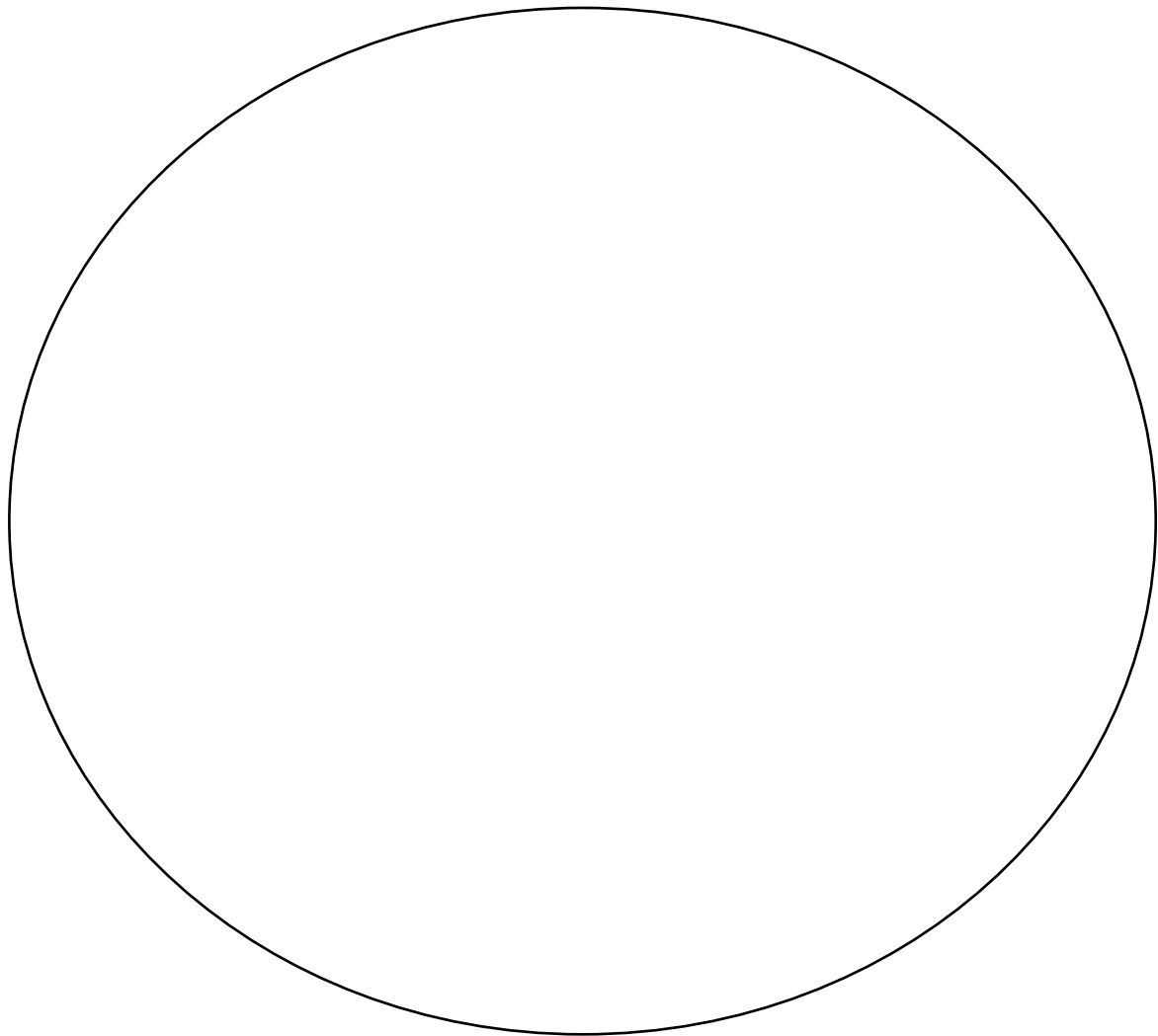
☐ Are there any weapons in the area where we provide care? Yes / no

☐ We require that weapons are either locked away or removed from the treatment area during home visits. Do you agree to do this (the VA can provide free gun locks if needed (from VA police))? Yes / no

☐ We ask that you and persons in the home refrain from smoking, vaping during home visits and refrain from using alcohol/drugs before and during home visits. Do you agree to do this? Yes / no / NA
 ☐ Is your residence in a remote area? Yes / no
 ☐ Do you have cell phone coverage at your home? Yes / no
 ☐ Is there any helpful information regarding your home or environment that you we should know before coming out? Yes / no

☐ Confirm all equipment needed for home visit is in working condition (charged, etc.)
 ☐ Schedule use of government vehicle

[illegible]



Function

Activities of Daily Living (ADL)

Check if independent in the following.

Bathing

☐ Dressing

☐ Toileting

☐ Transferring

☐ Continence

☐ Feeding

Total: ____ / 6

Independent Activities of Daily Living (iADLs)

Check if independent in the following.

☐ Housekeeping

☐ Laundry

☐ Managing money

☐ Preparing meals

☐ Shopping (for groceries and other necessities)

☐ Transportation

☐ Using communication devices (telephone, computer)

☐ Handling medications

☐ Assisting with medical care

Medication Risk

10+ medications Yes/No

Non-VA meds other than OTC Yes/No

High risk meds (see list) Yes/No

Med non-compliance Yes/No

Recent fall Yes/No

Delirium triage screen positive Yes/No

Place Pharmacy Consult

High Risk Medications**Opioids**

Acetaminophen/hydrocodone
(Vicodin)

Acetaminophen/oxycodone (Percocet)

Acetaminophen/codeine

Hydromorphone (Dilaudid)

Morphine

Oxycodone

Methadone

Fentanyl

Codeine

Tramadol

Benzodiazepines

Lorazepam (Ativan)

Alprazolam (Xanax)

Clonazepam (Klonopin)

Diazepam (Valium)

Temazepam (Restoril)

Chlordiazepoxide (Librium)

Midazolam (Versed)

Anticoagulants

Warfarin (Coumadin)

Rivaroxaban (Xarelto)

Apixaban (Eliquis)

Fondaparinux (Arixtra)

Dabigatran (Pradaxa)

Dalteparin (Fragmin)

Enoxaparin (Lovenox)

Muscle Relaxants/Antispasmodic

Cyclobenzaprine (Flexeril)

Metaxalone (Skelaxin)

Baclofen

Methocarbamol (Robaxin)

Other - if daily or if + delirium

Diphenhydramine/Benadryl

Hydroxyzine

Meclizine (Antivert)

Sleep aids (OTC or prescription)

Digoxin

Lithium

NSAIDs (ibuprofen, naproxen)

Food insecurity questions

- ☐ In the past 3 months, were you worried that your food would run out or were there times that it did run out before you had money to buy more?
- ☐ In the 3 months, did you have issues getting enough food that were not related to finances? For example, no transportation to the grocery store, or no place to store/keep food?
- ☐ In the past 3 months, did you have issues getting healthy food or have issues following a food plan suggested by your provider, for example heart healthy or diabetic diet?

Social Support

- ☐ Significant Other
- ☐ Child(ren)
- ☐ Extended Family
- ☐ Other Support Persons
- ☐ Primary Caregiver
- ☐ No Support

Home Accessibility

Residence

House

Multilevel Yes/No

Apartment

Steps entering Yes/No

Steps within residence Yes/No

Bathroom

Accessible Yes/No

Bathes at: Bed Yes/No

Tub/Shower Yes/No

Not at all Yes/No

Transportation Checklist

- ☐ Patient still drives
- ☐ Family/Caregiver transports
- ☐ Eligible - uses VA transportation
- ☐ Adequate resources
- ☐ Some difficulties
- ☐ Public transportation
- ☐ Inadequate

Home Environment

- ☐ Cluttered
- ☐ Clean
- ☐ Sanitation Problems
- ☐ Lack of heat
- ☐ Lack of water
- ☐ Insect infested
- ☐ Lack of basic appliances
- ☐ Fall risks
 - Throw rugs
 - Poor lighting
 - Entrance concerns
 - Bathroom concerns
 - O2 tubing
 - Pets
 - Other

Notes _____

CAREGIVER SCREENING

Do you consider yourself a caregiver to the patient?

- ☐ Yes
- ☐ No
- ☐ Unknown

Relationship to patient

- ☐ Spouse/partner
- ☐ Child
- ☐ Parent
- ☐ Sibling
- ☐ Other relative
- ☐ Non-relative

Do you (the caregiver) live with the patient?

- ☐ Yes
- ☐ No
- ☐ Unknown

On average, how much time per week do you spend as a caregiver?

- ☐ <1 hour
- ☐ 1-5 hours
- ☐ 6-10 hours
- ☐ 11-20 hours
- ☐ 21-40 hours
- ☐ >40 hours/week

Which of these duties do you help the patient with? Check all that apply)

- ☐ Bathing
- ☐ Dressing
- ☐ Toileting
- ☐ Transferring
- ☐ Continence
- ☐ Feeding (excludes preparing meals)
- ☐ Preparing meals
- ☐ Housekeeping
- ☐ Laundry
- ☐ Managing money
- ☐ Shopping (for groceries and other necessities)
- ☐ Transportation
- ☐ Using communication devices (telephone, computer)
- ☐ Handling medications
- ☐ Assisting with medical care

6. Do you have anyone else to help with caregiving (paid or unpaid)?

- ☐ Yes
- ☐ No

If yes, what is the relationship to patient?

- Spouse/partner
- ☐ Child
- ☐ Parent
- ☐ Sibling
- ☐ Other relative
- ☐ Non-relative
- ☐ Professional service? (e.g. home health, aid, etc)

ZARIT CAREGIVER BURDEN SCREENING

	Never	Rarely	Sometimes	Quite Frequently	Nearly Always
1. Do you feel that because of the time you spend with (your relative) that you don't have enough time for yourself?	0	1	2	3	4
2. Do you feel stressed between caring for (your relative) and trying to meet other responsibilities?	0	1	2	3	4
3. Do you feel strained when you are around (your relative)?	0	1	2	3	4
4. Do you feel uncertain about what to do about (your relative)?	0	1	2	3	4

Is there anything else you would like us to know about the veteran?

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.

Elder Mistreatment (EM-SART)

1. Pre Screen Yes/No (Reason not pre screened _____)

1. Has anyone close to you harmed you? Yes/No

2. Has anyone close to you failed to give you the care that you need? Yes/No

3. Do you (the screener) have concerns? Yes/No

1. Caregiver Appears (circle)

1. Lack knowledge of older adults medical needs

2. Unengaged and inattentive in caring for older adult

3. Frustrated, tired, angry, burdened by older adult

4. Overly concerned (anxious/hovering)

2. Patient Appears (circle)

1. To lack access to resources

2. To have substance abuse issues

3. To have mental health needs

4. Other concerns _____

2. If Yes to a, b, or c proceed with screen. If no to all, mark prescreen negative and stop



• In the past 6 months

• Have you needed help with bathing, dressing, shopping, banking or meals? Yes/No

• If Yes, Have you had someone who helps you with this? Yes/No

• Who _____ Relationship _____

• If yes, Is this person always there when you need them? Yes/No

Has anyone close to you called you names, put you down, or made you feel bad? Yes/No

Has anyone told you that you give them too much trouble? Yes/No

Has anyone close to you threatened you or made you feel bad? Yes/No

Has anyone tried to force you to sign papers or use money against your will? Yes/No

Yes 1-2, notify provider of positive screen results

Charting

- ☐ Complete SCOUTS note
- ☐ Document Geriatric Syndrome screenings, if applicable
- ☐ Tele-Technology
 - New Issued
 - VVC appointment set up
 - Demonstration/Education
- ☐ Enter any new consults/referral resources
 - Primary Care
 - Social Work
 - Pharm D
 - Mental Health
 - Nurse Care Manager
 - (RN PACT CM)
 - Home Based Primary Care (HBPC)
 - Geriatric Assessment (GERI PACT)
 - Prosthetics / DME
 - Caregiver Support Program

Report/Warm Handoff

- ☐ Verbal report given
to _____
SCOUTS Medical Direction
- ☐ Notify SCOUTS Medical Directions to sign
off orders
- ☐ Notify PACT team of any needs

Equipment/DME issued

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

SCOUTS PLAYBOOK

VA



U.S. Department of Veterans Affairs

Veterans Health Administration

VA Northeast Ohio Healthcare System

GENERAL

Environmental Safety Concerns

Home Safety

Cognitive Impairment Algorithm

Are any of the following present (in the absence of delirium)?

1. Score of < 4 on MiniCog screen
2. History of dementia with change in caregiver burden and or function/behavior

Yes

Consider the following intervention(s):

1. Geriatrics referral.
2. Neuropsychology testing.
3. Home health aide
4. Adult Day Health Care
5. Primary Care Social Work consult
6. Medical Alert Button
7. Drivers Safety consult.
8. Dementia Care Coordination

Fall Risks

1. Clutter
2. Throw rugs
3. Lighting
4. Oxygen use? Tubing?
5. Guardian Life Alert?

Food Insecurity

1. Finances?
2. Access?
3. Preparation?

These interventions

powerhead, tub/transfer bench, ADL kit)

) pamphlet, HBPC consult)

ion on adaptive ADL/IADL

ars, HISA grant)

ee elder abuse in playbook)

ntion, healthy foods, VA resources, etc)



Highlight: San Diego

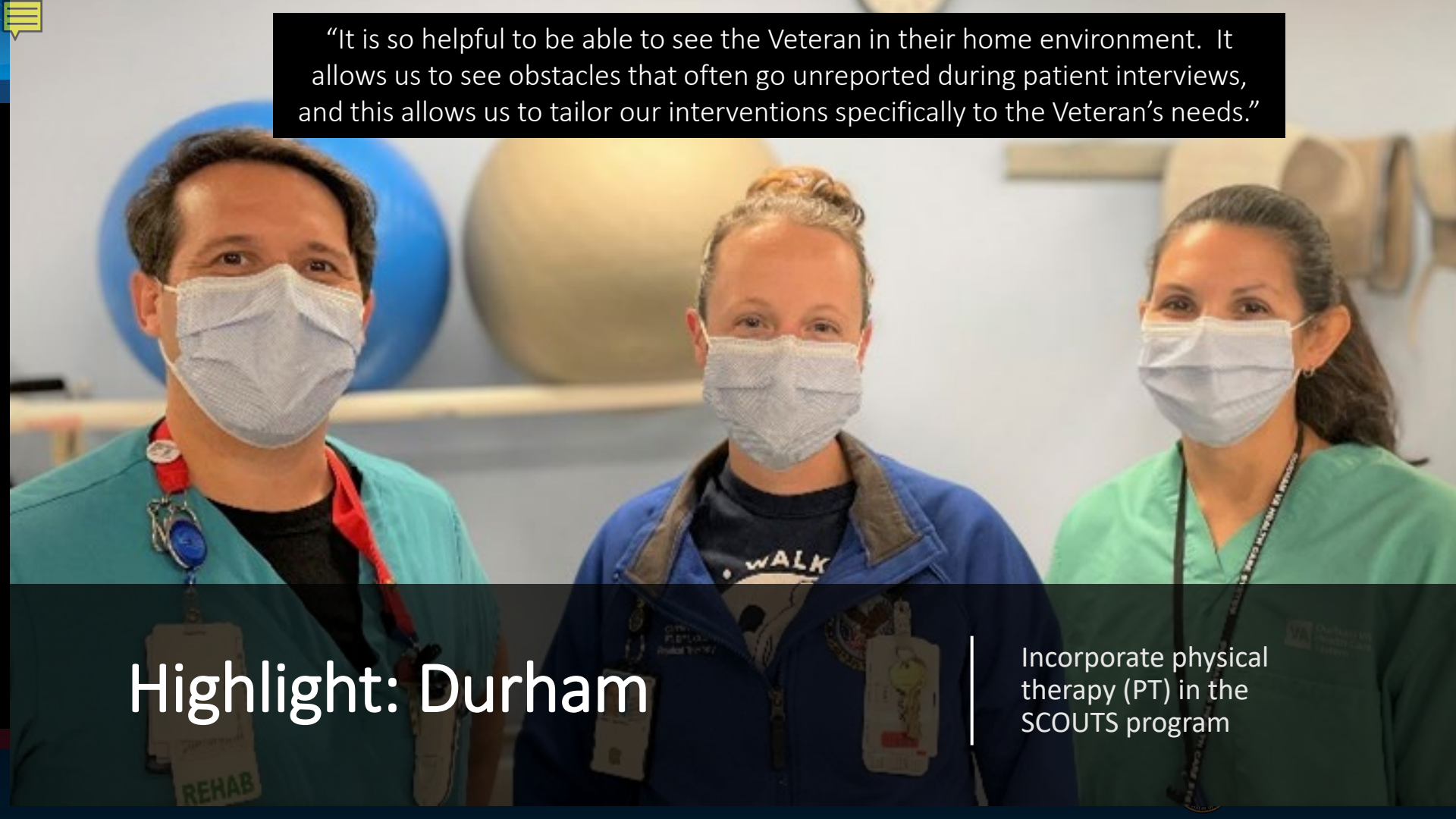
- Created an Acute Care Geriatrician role to staff home visits
- ICTs work with ED SCOUTS director to identify patients
- Medication review for expired or unused medication
- Home Safety Check
- Screens for geriatric syndromes and unmet needs
- Reviews with Dr. Beben who performs a video assessment of the patient and develops plan



Mr. Schiernbeck “It was nice to have him here to make sure we’re doing everything right (after the Emergency Room visit) ... especially the home safety check and double-checking medicines.

Mrs. Schiernbeck, ““This visit was wonderful for elderly Veterans.”



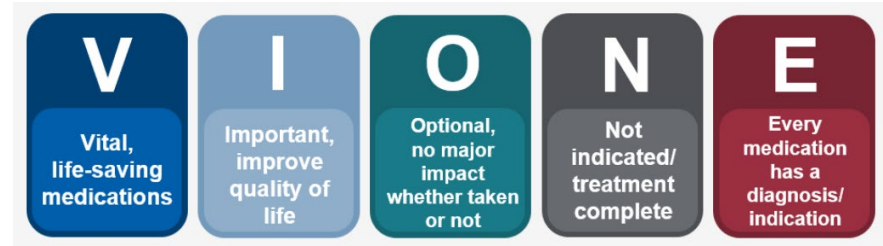
A photograph of three healthcare professionals standing in a clinical setting. On the left is a man with dark hair wearing a light blue surgical mask and teal scrubs. In the center is a woman with blonde hair tied back, wearing a light blue surgical mask and a blue jacket over a dark t-shirt. On the right is a woman with dark hair, wearing a light blue surgical mask and green scrubs. They are all looking towards the camera. In the background, there are large blue and yellow exercise balls. A black text box is at the top, and a dark blue banner is at the bottom with white text.

“It is so helpful to be able to see the Veteran in their home environment. It allows us to see obstacles that often go unreported during patient interviews, and this allows us to tailor our interventions specifically to the Veteran’s needs.”

Highlight: Durham

Incorporate physical therapy (PT) in the SCOUTS program

Highlight: Palo Alto





Highlight: Dallas

Home Safety Check-in: ICTs performed a test of the patient's Guardian Life Alert device. The device indicated *"no-signal"* and did not dispatch 911.

HRO:

- Prosthetics: Recalled the nonfunctioning Guardian Alert Devices and started the replacement
- Impact 1,500 Veterans Effected by ERS (Guardian Alter 911) incompatibility with current cellular networks.