CATCH RURAL Falls

<u>C</u>oordinated <u>A</u>ction <u>T</u>oward <u>C</u>ommunity <u>H</u>ealth: <u>R</u>ed<u>U</u>ce <u>R</u>isk <u>A</u>nd <u>L</u>imit Falls

Introduction to the Stopping Elderly Accidents, Deaths & Injuries (STEADI) Initiative

University of Nebraska Medical Center

Acknowledgements: Funding for the CATCH RURAL Falls Program

Introductions and Contact Information

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- Expertise in fall risk management and mobility
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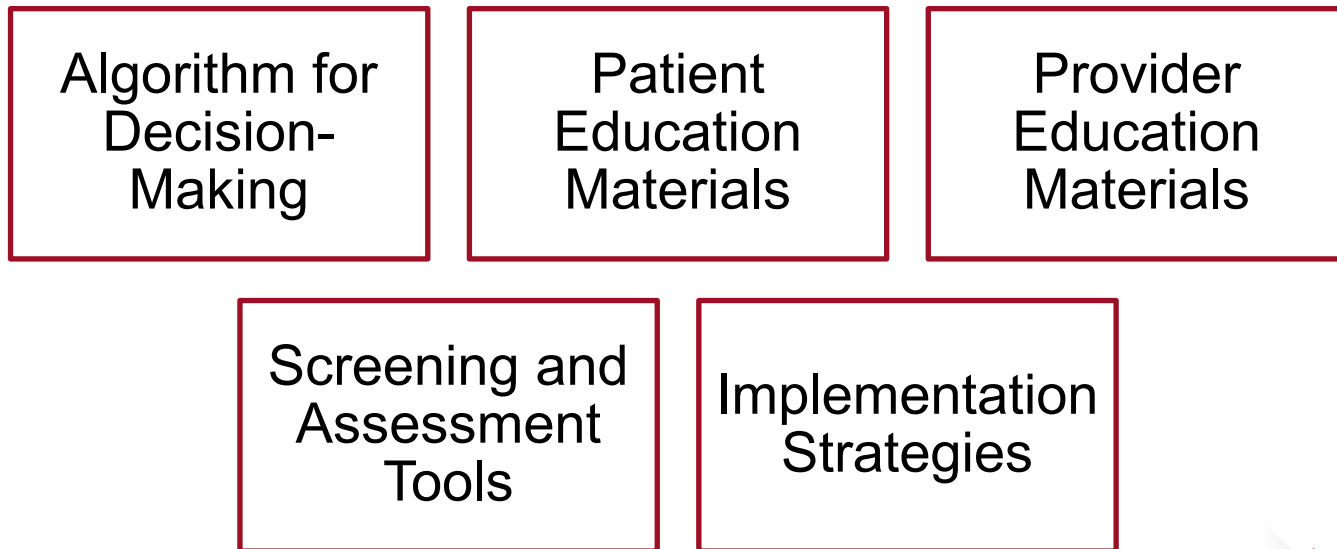
Educational Objective

- Explain the purpose of the Center for Disease Control's Stopping Elderly Accidents, Deaths & Injuries (STEADI) Initiative

Centers for Disease Control (CDC) STEADI Initiative

STEADI Stopping Elderly Accidents, Deaths & Injuries

Created for healthcare providers to support implementation of a coordinated approach to manage falls

Algorithm for Decision-Making	Patient Education Materials	Provider Education Materials

Screening and Assessment Tools	Implementation Strategies

Three Key Actions:
Screening, Assessment, and Intervention

- Identification of patients at increased risk of falling to determine if additional in-depth assessment of risk factors is needed
- Intended to be quick

Fall Risk Screening

- Identification of specific risk factors to guide intervention
- More thorough and therefore more time-consuming

Fall Risk Assessment

- Reduction of identified risk factors using effective strategies
- Individualized to the patient
- May include direct medical management or referral to other health care professionals or resources

Fall Risk Intervention

STEADI Algorithm for Fall Risk Screening, Assessment, and Intervention among Community-Dwelling Adults 65 years and older

START HERE → **① SCREEN** for fall risk yearly, or any time patient presents with an acute fall.

| Available Fall Risk Screening Tools: | • **Stay Independent:** a 12-question tool [at risk if score ≥ 4]
  - **Important:** If score < 4, ask if patient fell in the past year
   (If **YES** → patient is at risk) | • **Three key questions** for patients [at risk if **YES** to any question]
  - Feels unsteady when standing or walking?
  - Worries about falling?
  - Has fallen in past year?
   » If **YES** ask, "How many times?" "Were you injured?" |

SCREENED <u>NOT</u> AT RISK

PREVENT future risk by recommending effective prevention strategies.

- Educate patient on fall prevention
- Assess vitamin D intake
  - If deficient, recommend daily vitamin D supplement
- Refer to community exercise or fall prevention program
- Reassess yearly, or any time patient presents with an acute fall

SCREENED AT RISK

② ASSESS patient's modifiable risk factors and fall history.

Common ways to assess fall risk factors are listed below:

Evaluate gait, strength, & balance
Common assessments:
- Timed Up & Go   • 4-Stage
- 30-Second Chair Stand   Balance Test

Identify medications that increase fall risk
(e.g., Beers Criteria)

Ask about potential home hazards
(e.g., throw rugs, slippery tub floor)

Measure orthostatic blood pressure
(Lying and standing positions)

Check visual acuity
Common assessment tool:
- Snellen eye test

Assess feet/footwear

Assess vitamin D intake

Identify comorbidities
(e.g., depression, osteoporosis)

③ INTERVENE to reduce identified risk factors using effective strategies.

Reduce identified fall risk
- Discuss patient and provider health goals   • Develop an individualized patient care plan (see below)

Below are common interventions used to reduce fall risk:

Poor gait, strength, & balance observed
- Refer for physical therapy
- Refer to evidence-based exercise or fall prevention program (e.g., Tai Chi)

Medication(s) likely to increase fall risk
- Optimize medications by stopping, switching, or reducing dosage of medications that increase fall risk

Home hazards likely
- Refer to occupational therapist to evaluate home safety

Orthostatic hypotension observed
- Stop, switch, or reduce the dose of medications that increase fall risk   • Establish appropriate blood pressure goal
- Educate about importance of exercises (e.g., foot pumps)   • Encourage adequate hydration
       • Consider compression stockings

Visual impairment observed
- Refer to ophthalmologist/optometrist   • Consider benefits of cataract surgery
- Stop, switch, or reduce the dose of medication affecting vision (e.g., anticholinergics)   • Provide education on depth perception and single vs. multifocal lenses

Feet/footwear issues identified
- Provide education on shoe fit, traction, insoles, and heel height   • Refer to podiatrist

Vitamin D deficiency observed or likely
- Recommend daily vitamin D supplement

Comorbidities documented
- Optimize treatment of conditions identified   • Be mindful of medications that increase fall risk

FOLLOW UP with patient in 30-90 days.

Discuss ways to improve patient receptiveness to the care plan and address barrier(s)

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SCREENED NOT AT RISK

PREVENT future risk by recommending effective prevention strategies.

- Educate patient on fall prevention
- Assess vitamin D intake
  - If deficient, recommend daily

SCREENED AT RISK

2 **ASSESS** patient's modifiable risk factors and fall history.

Common ways to assess fall risk factors are listed below:

3 **INTERVENE** to reduce identified risk factors using effective strategies.

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Screening Results Guide Next Steps

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Fall Risk (2) Assessment and (3) Intervention

SCREENED AT RISK

2 **ASSESS** patient's modifiable risk factors and fall history.

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Common assessments:
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FOLLOW UP with patient in 30-90 days.
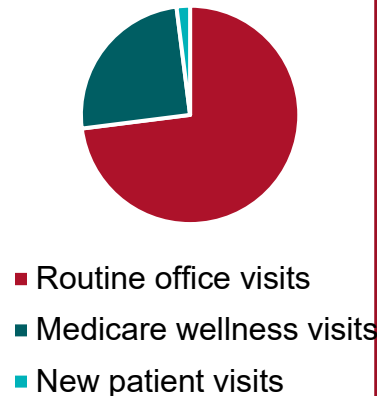Discuss ways to improve patient receptiveness to the care plan and address barrier(s)

Research Supporting the STEADI Toolkit

STEADI was successfully incorporated into primary care at Oregon Health Science University via team training, EHR tools, and tailored clinic workflow
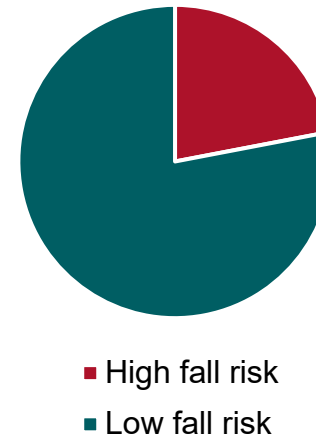
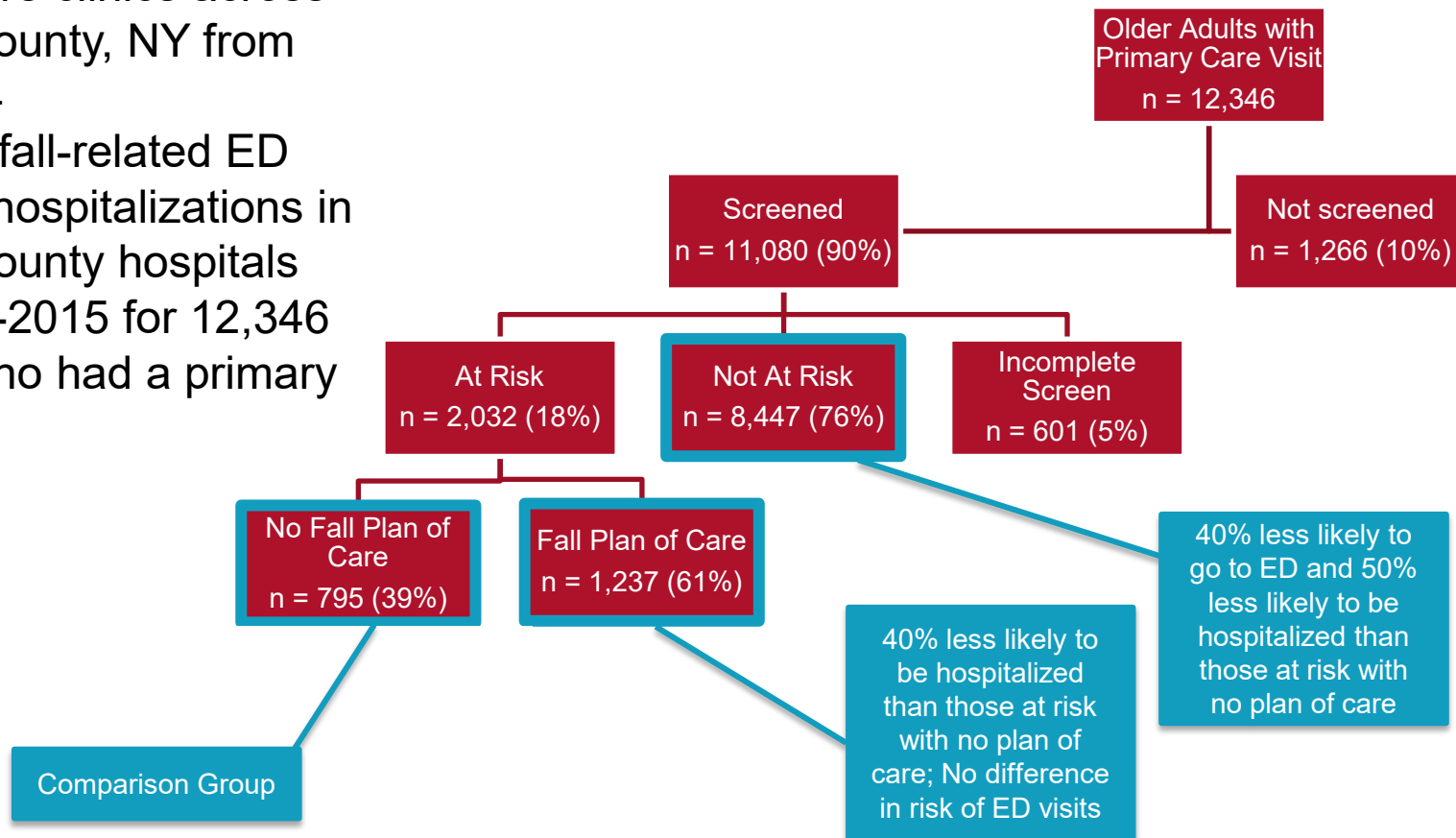| 75% (18/24) of providers used STEADI tools	64% (773/1207) of patients were screened over 6 months *(Did not consider patients with history of frequent falls, dementia, non-ambulatory, or on hospice)*	STEADI Use by Visit Type	Screening Results	At Risk Patient Workflow

STEADI Use by Visit Type
- Routine office visits
- Medicare wellness visits
- New patient visits

Screening Results
- High fall risk
- Low fall risk

At Risk Patient Workflow
- Assessment deferred
- Assessment initiated

Eckstrom et al. (2017)

Research Supporting the STEADI Toolkit

- STEADI implemented in 19 primary care clinics across Broome County, NY from 2012-2014
- Assessed fall-related ED visits and hospitalizations in Broome County hospitals from 2012-2015 for 12,346 patients who had a primary care visit

Older Adults with Primary Care Visit
n = 12,346

Screened
n = 11,080 (90%)

Not screened
n = 1,266 (10%)

At Risk
n = 2,032 (18%)

Not At Risk
n = 8,447 (76%)

Incomplete Screen
n = 601 (5%)

No Fall Plan of Care
n = 795 (39%)

Fall Plan of Care
n = 1,237 (61%)

Comparison Group

40% less likely to be hospitalized than those at risk with no plan of care; No difference in risk of ED visits

40% less likely to go to ED and 50% less likely to be hospitalized than those at risk with no plan of care

Johnston et al. (2019)

Summary: Review of Objectives

Explain the purpose of the Center for Disease Control's Stopping Elderly Accidents, Deaths & Injuries (STEADI) Initiative
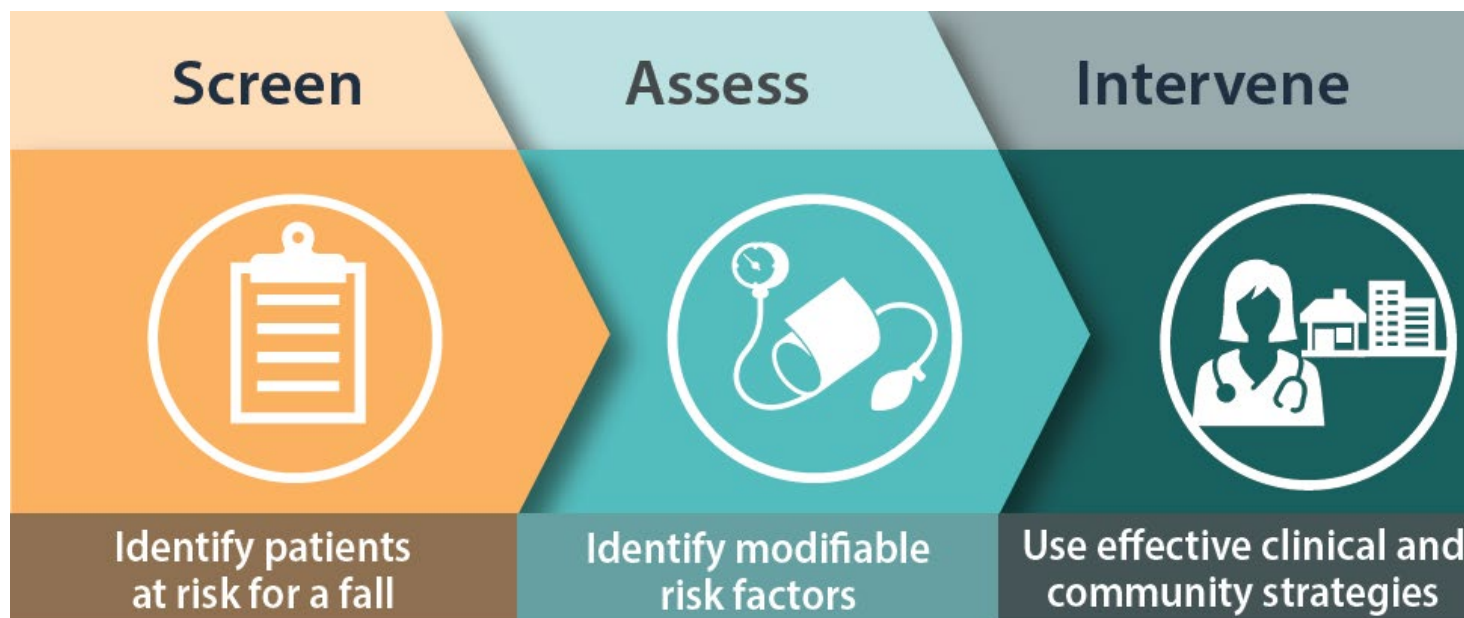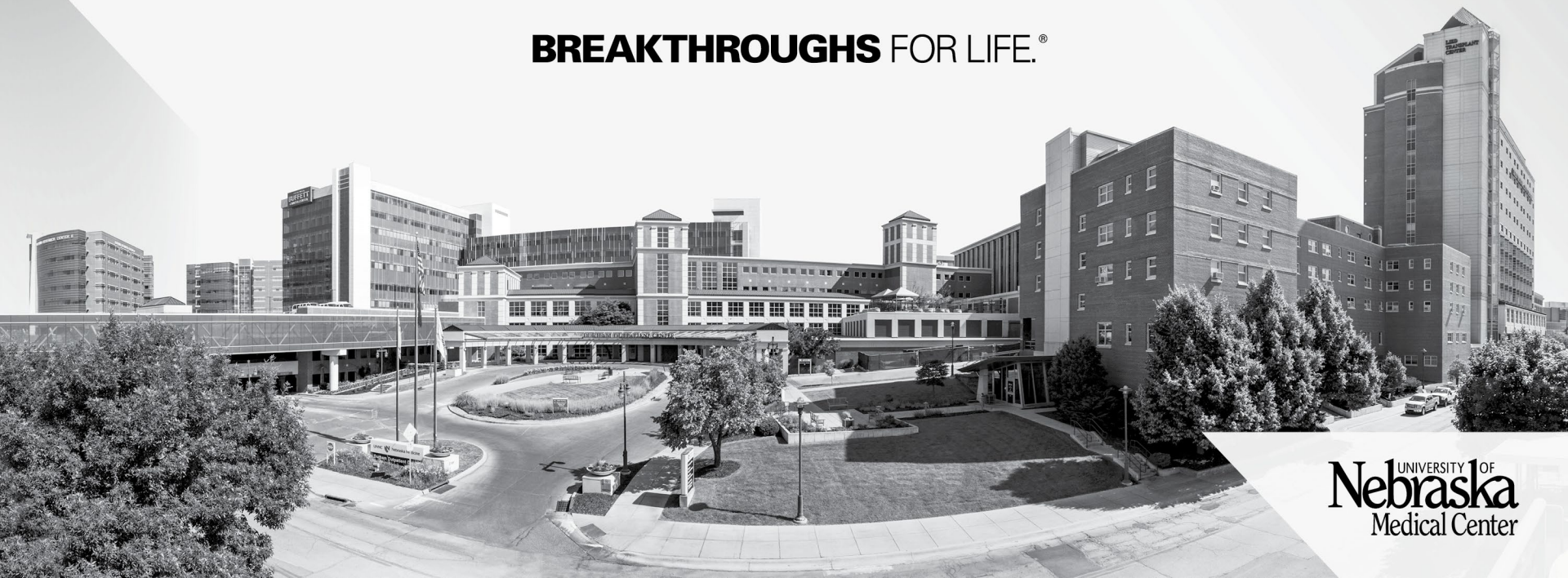
References and Resources

- [Center for Disease Control (CDC) Stopping Elderly Accidents, Deaths, and Injuries (STEADI) Home Page](#)
- [CDC STEADI Algorithm for Fall Risk Screening, Assessment, and Intervention](#)
- [CDC STEADI Coordinated Care Plan to Prevent Older Adult Falls](#)
- Eckstrom E, Parker EM, Lambert GH, Winkler G, Dowler D, Casey CM. Implementing STEADI in academic primary care to address older adult fall risk. *Innov Aging*. 2017;1(2):igx028. doi:10.1093/geroni/igx028
- Johnston YA, Bergen G, Bauer M, et al. Implementation of the Stopping Elderly Accidents, Deaths, and Injuries initiative in primary care: An outcome evaluation. *Gerontologist*. 2019;59(6):1182-1191. doi:10.1093/geront/gny101