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BIG DATA & GERIATRIC MODELS OF CARE

Transitions to and from the Emergency Department –

– Where the wheels fall off

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Emergency Rooms Are No Place for the Elderly

By PAULINE W. CHEN, M.D. MARCH 13, 2014 12:01 AM 144 Comments

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The elderly man lived alone in an apartment complex not far from the hospital. A younger neighbor, who'd watched him hobble down the building's stairwell for nearly a week, insisted on taking him to the emergency room. Doctors there immediately diagnosed an infection

DOCTOR AND PATIENT
Dr. Pauline Chen on medical care.

Doctor Patient

Emergency Department > Home Care Transitions…

✗Emergency rooms are not friendly environments for frail older adults

✗Lots of interaction between the ED and home care

✗Post-discharge is a high risk period for clients

What's Missing?

We don't know a lot about the experience of post-ED patient safety events from the client or formal caregiver perspective.

Main Objective:

To understand the incidence, determinants, consequences, and *experience* of adverse events among ED patients who recently transitioned to home care from the ED.

Trans-ED-HC:
A Mixed Methods Study

1. Population-Level Secondary Data
2. Exploratory Focus Groups and Interviews

Multiple perspectives:

- Home Care Clients
  - Caregivers
- ED/Nursing Staff
- Home Care Staff

- Three geographically distinct locations in Southern Ontario
- Chosen for site variation and representativeness

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Patient Safety Events after ED Discharge

- *What the data tells us*

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Methods …

Retrospective cohort study, Fiscal 2013/14, HNHB LHIN

- Community-dwelling older adults age 65 or older discharged home from the ED
- Existing home care clients or newly referred home care clients (w/in 2 days)
- Non-institutional (private home, AL, SH)
- Not palliative
- N= 11,323 unique clients (19,664 visits)

Methods …

Adverse Patient Safety Events:

- Validated adverse patient safety events from ED and hospital data at 90 days post ED discharge

Adverse Outcomes:

- Death
- LTC (nursing home) application

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Adverse Patient Safety Events (Doran et al., 2013)

1. Injurious fall
2. Injury other than fall
3. Med-related
4. Sepsis / Bacteraemia
5. Delirium
6. Deep Vein Thromb.
7. Diabetic Foot ulcer
8. Pressure ulcer
9. Pulmonary embolus
10. Venous Leg ulcer
11. Suicide/self-harm
12. Other: Wound infection, etc.

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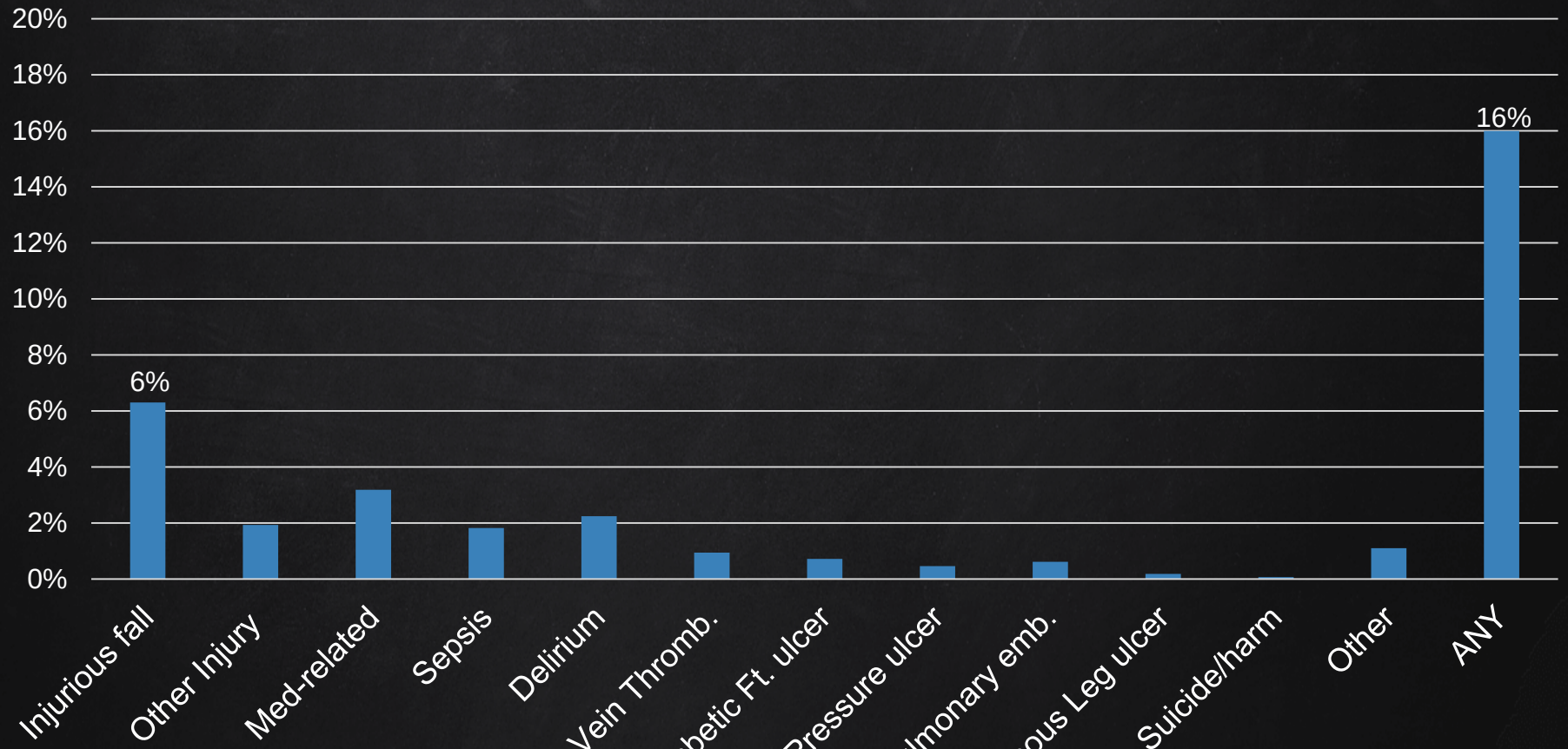
Adverse Patient Safety Events, 90-days



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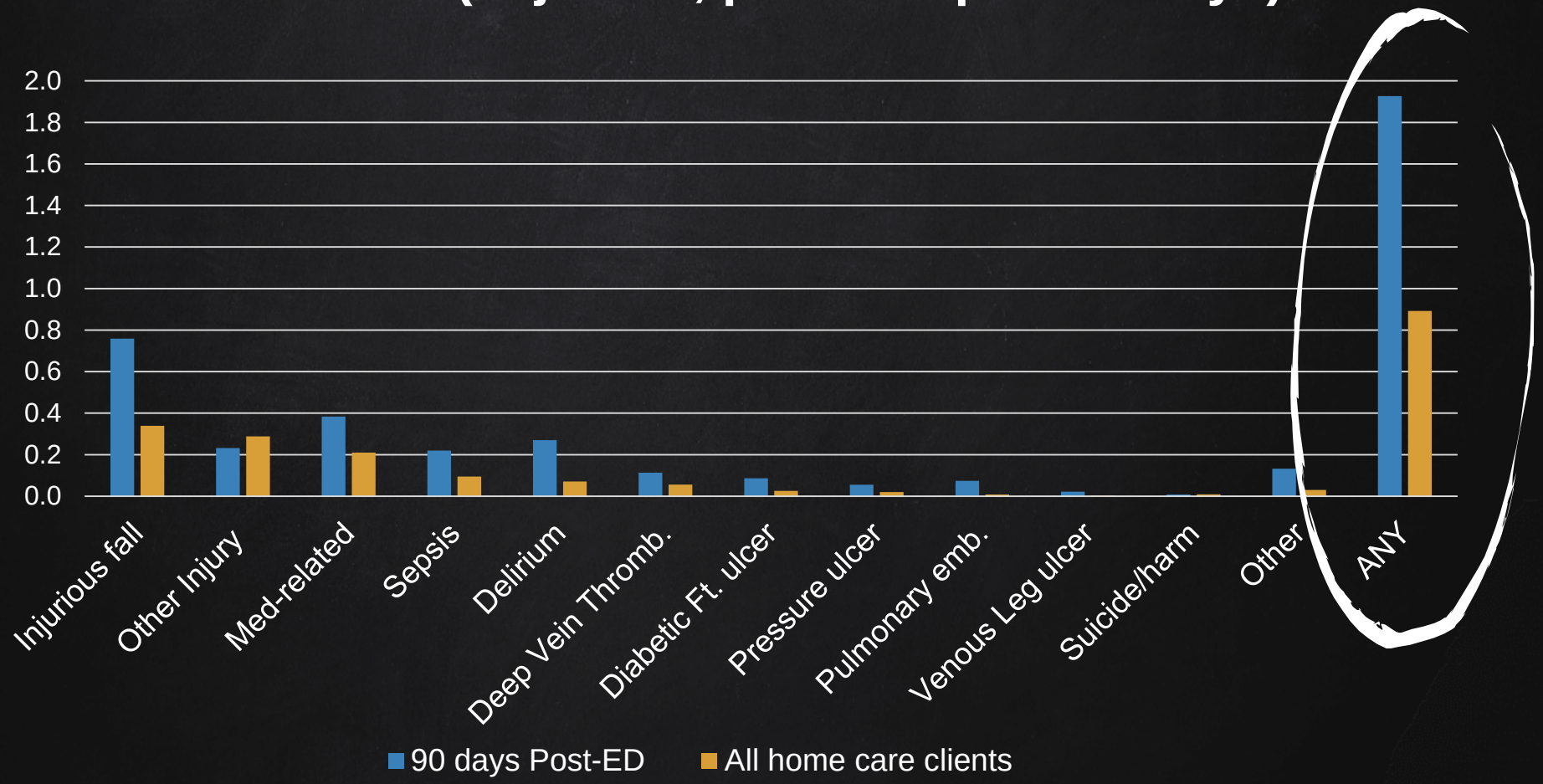
Adverse Patient Safety Events, 90-day Rates (adjusted, per 1000 patient days)



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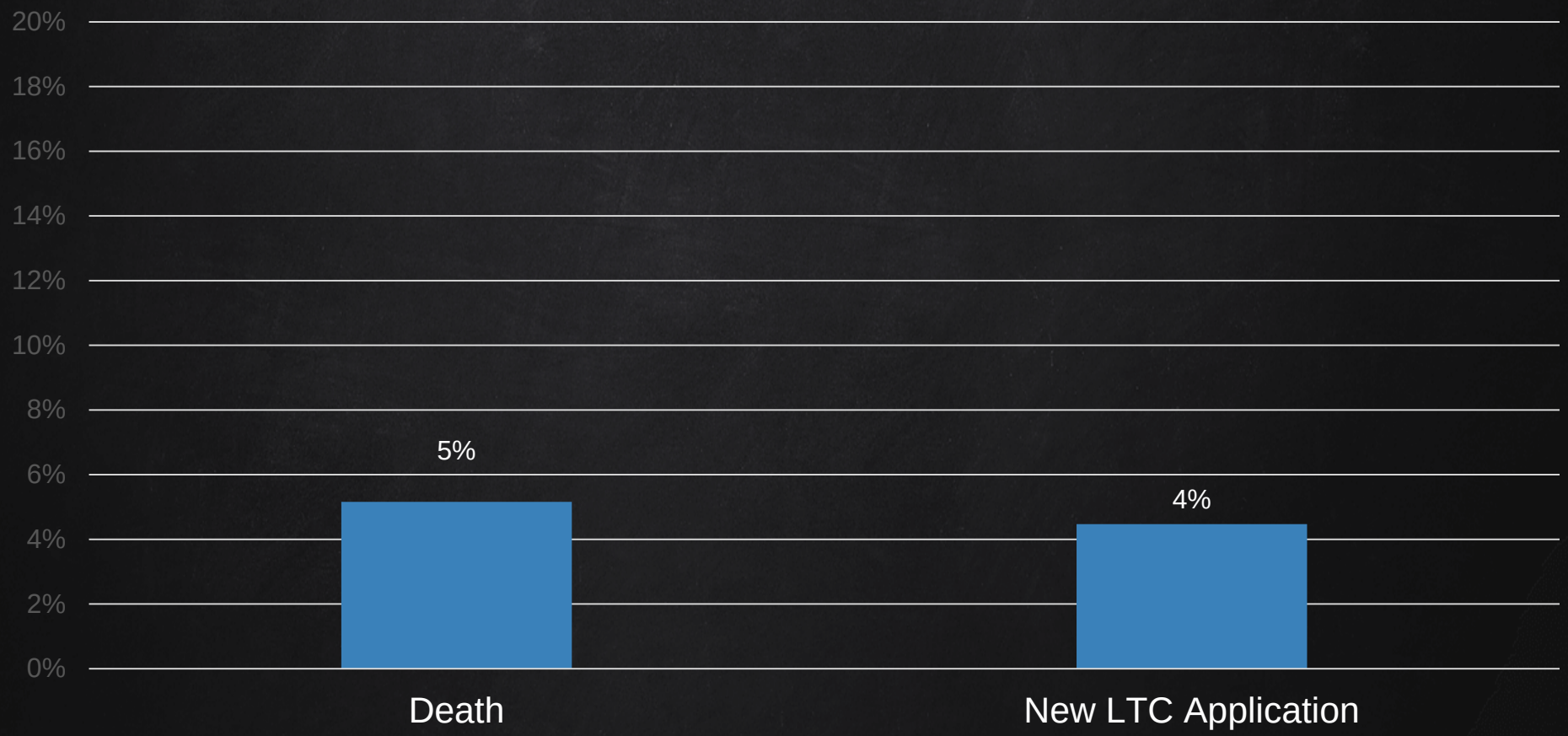
Adverse Outcomes, 90-days



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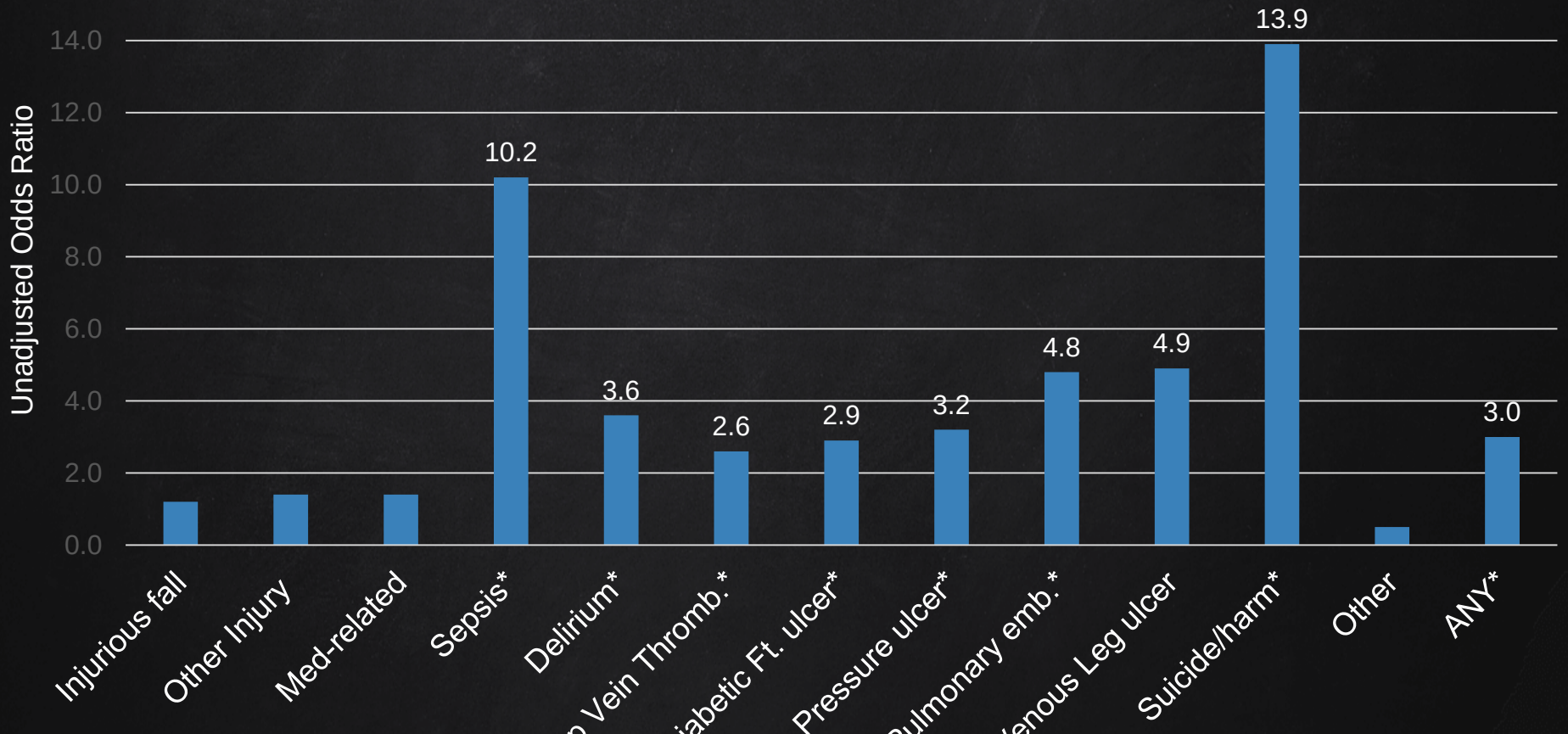
Association with Death, 90-day



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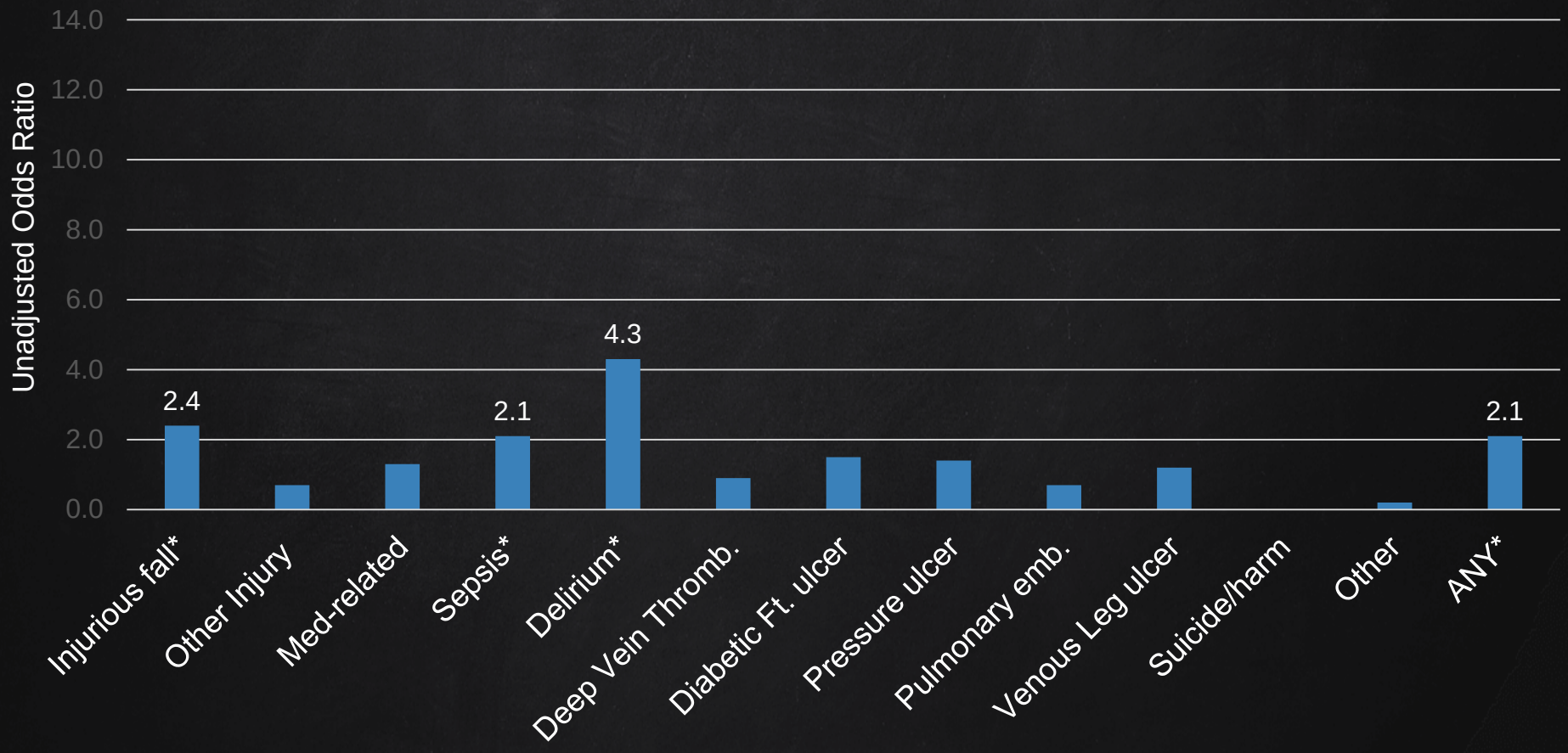
Association with New LTC Application, 90-days



The Patient and Staff Experience

- What we heard -

Methods

Clients/Families

- Random clients that had ED visit within 90 days, currently receiving home care, no major cognitive impairment, etc.
- Informal caregivers included.
- Semi-structured interview guide focusing on experiences.
- N=7

Providers

- Different care team roles (doctors, nurses, care coordinators, home care staff, etc.)
- Semi-structured focus groups
- Three geographic areas (rural, suburban, urban)
- N=36

- Applied thematic analysis (Guest, 2012);
- Thematic Network Analysis (Clarke & Braun, 2013; Attride-Stirling, 2001)

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Main Themes from Patient & Caregiver Interviews

✗ Clarity of Process

✗ Safety in the Home

✗ Transportation Safety

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Clarity of Processes

"[various health care workers] come during the day, and when your family is working all the time it's hard to get [your family] to even bring you home - never mind come for things like that. You never know when someone's going to walk into the room to ask you questions anyway."

Safety in the Home

"I need to ask [the home care workers to keep an eye on my husband] sometimes…but he's kind of depending on me very much, and that is the problem, makes it hard..."

Transportation Safety

"The minute you're told you're going home, that's it. No one wants anything to do with you. And it's hard to get anyone to, to even listen to you. They think, 'Oh, she's going home, or he's going home, they're ok.' That's not always the case…"

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Main Themes from Care Provider Groups

✗Differing Expectations

✗Lack of Communication

✗Team Dynamics

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Different Expectations

"A lot of the seniors that come in…they are under the impression that there is 24 hour care available, so the family is also expecting that… it's a bad start to arranging safe care"

- Home Care Coordinator

Lack of Communication

"It often feels like we have gotten so tied up in the logistics that we don't advocate for the patient anymore…loose ends don't come together"

- ED Nurse

Team Dynamics

"…if you've got a really good team, the ability to advocate for the patients sometimes is absolutely wonderful. You make it work."

- Emergency Department Nurse

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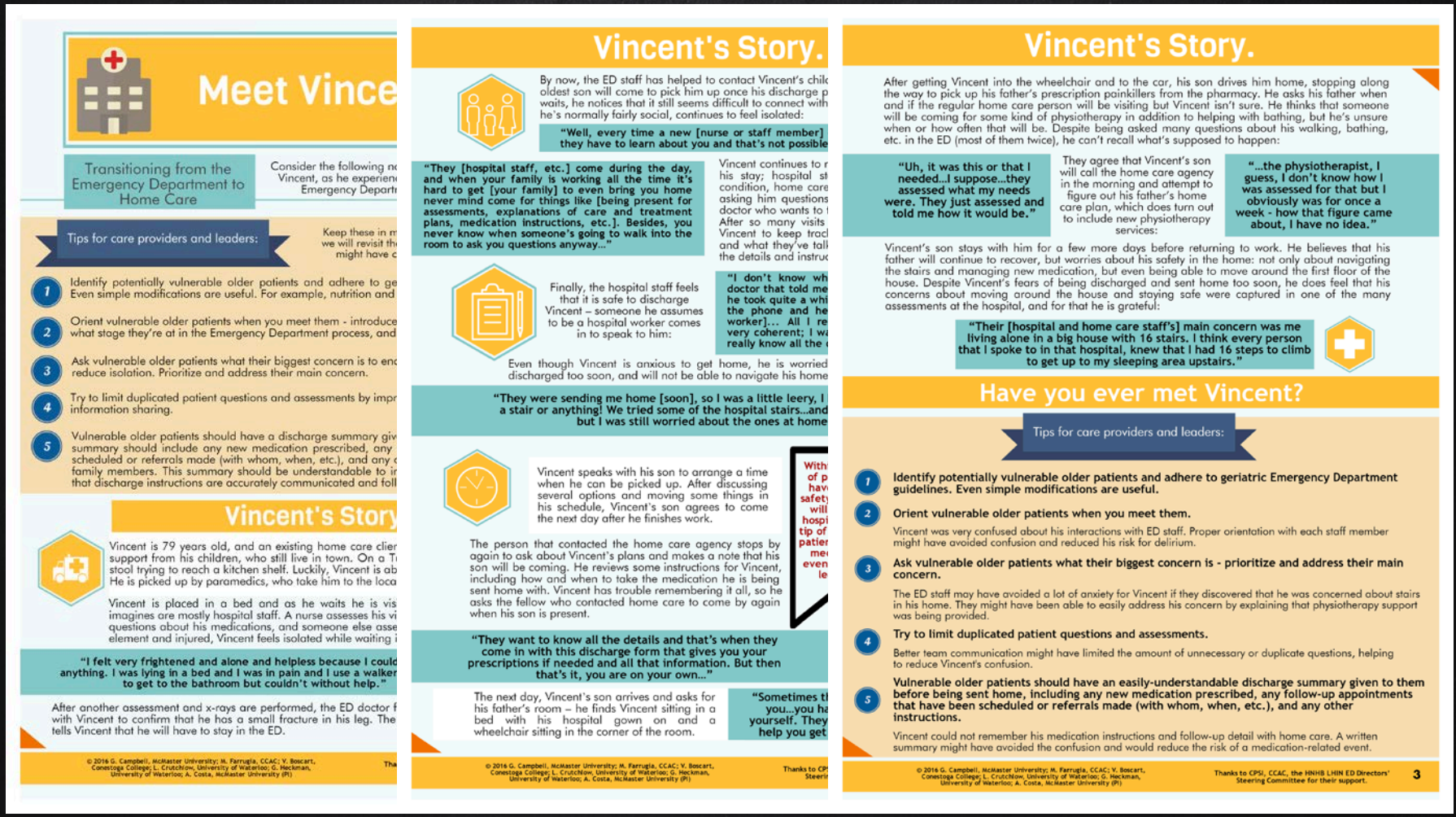
Now what? ..

Narrative 'Fact Sheets'

- **Re-storying** a valuable method to recognize and allow experience to come to the forefront.

- Narratives are one way in which we understand and make meaning of the world around us.
- **Grounded in data**



Meet Vince

Transitioning from the Emergency Department to Home Care

Consider the following n
Vincent, as he experien
Emergency Depart

Tips for care providers and leaders:

Keep these in m
we will revisit th
might have c

1. Identify potentially vulnerable older patients and adhere to ge
Even simple modifications are useful. For example, nutrition and
2. Orient vulnerable older patients when you meet them - introduce
what stage they're at in the Emergency Department process, and
3. Ask vulnerable older patients what their biggest concern is to en
reduce isolation. Prioritize and address their main concern.
4. Try to limit duplicated patient questions and assessments by impr
information sharing.
5. Vulnerable older patients should have a discharge summary giv
summary should include any new medication prescribed, any
scheduled or referrals made (with whom, when, etc.), and any
family members. This summary should be understandable to i
that discharge instructions are accurately communicated and foll

Vincent's Story

Vincent is 79 years old, and an existing home care clier
support from his children, who still live in town. On a T
stool trying to reach a kitchen shelf. Luckily, Vincent is ab
He is picked up by paramedics, who take him to the loca

Vincent is placed in a bed and as he waits he is vis
imagines are mostly hospital staff. A nurse assesses his vi
questions about his medications, and someone else asse
element and injured, Vincent feels isolated while waiting

**"I felt very frightened and alone and helpless because I could
anything. I was lying in a bed and I was in pain and I use a walker
to get to the bathroom but couldn't without help."**

After another assessment and x-rays are performed, the ED doctor f
with Vincent to confirm that he has a small fracture in his leg. The
tells Vincent that he will have to stay in the ED.

Vincent's Story.

By now, the ED staff has helped to contact Vincent's child
oldest son will come to pick him up once his discharge p
waits, he notices that it still seems difficult to connect with
he's normally fairly social, continues to feel isolated:

**"Well, every time a new [nurse or staff member]
they have to learn about you and that's not possible**

"They [hospital staff, etc.] come during the day, and when your family is working all the time it's hard to get [your family] to even bring you home never mind come for things like [being present for assessments, explanations of care and treatment plans, medication instructions, etc.]. Besides, you never know when someone's going to walk into the room to ask you questions anyway..."

Vincent continues to r
his stay; hospital st
condition, home care
asking him questions
doctor who wants to
After so many visits
Vincent to keep trac
and what they've tal
the details and instruc

Finally, the hospital staff feels that it is safe to discharge Vincent – someone he assumes to be a hospital worker comes in to speak to him:

**"I don't know wh
doctor that told me
he took quite a whi
the phone and he
worker]... All I re
very coherent; I wa
really know all the**

Even though Vincent is anxious to get home, he is worried discharged too soon, and will not be able to navigate his home

"They were sending me home [soon], so I was a little leery, I a stair or anything! We tried some of the hospital stairs...and but I was still worried about the ones at home

Vincent speaks with his son to arrange a time when he can be picked up. After discussing several options and moving some things in his schedule, Vincent's son agrees to come the next day after he finishes work.

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The person that contacted the home care agency stops by again to ask about Vincent's plans and makes a note that his son will be coming. He reviews some instructions for Vincent, including how and when to take the medication he is being sent home with. Vincent has trouble remembering it all, so he asks the fellow who contacted home care to come by again when his son is present.

"They want to know all the details and that's when they come in with this discharge form that gives you your prescriptions if needed and all that information. But then that's it, you are on your own..."

The next day, Vincent's son arrives and asks for his father's room – he finds Vincent sitting in a bed with his hospital gown on and a wheelchair sitting in the corner of the room.

**"Sometimes t
you...you ha
yourself. They
help you get**

Thanks to CP
Steeri

Vincent's Story.

After getting Vincent into the wheelchair and to the car, his son drives him home, stopping along the way to pick up his father's prescription painkillers from the pharmacy. He asks his father when and if the regular home care person will be visiting but Vincent isn't sure. He thinks that someone will be coming for some kind of physiotherapy in addition to helping with bathing, but he's unsure when or how often that will be. Despite being asked many questions about his walking, bathing, etc. in the ED (most of them twice), he can't recall what's supposed to happen:

"Uh, it was this or that I needed...I suppose...they assessed what my needs were. They just assessed and told me how it would be."

They agree that Vincent's son will call the home care agency in the morning and attempt to figure out his father's home care plan, which does turn out to include new physiotherapy services:

"...the physiotherapist, I guess, I don't know how I was assessed for that but I obviously was for once a week - how that figure came about, I have no idea."

Vincent's son stays with him for a few more days before returning to work. He believes that his father will continue to recover, but worries about his safety in the home: not only about navigating the stairs and managing new medication, but even being able to move around the first floor of the house. Despite Vincent's fears of being discharged and sent home too soon, he does feel that his concerns about moving around the house and staying safe were captured in one of the many assessments at the hospital, and for that he is grateful:

"Their [hospital and home care staff's] main concern was me living alone in a big house with 16 stairs. I think every person that I spoke to in that hospital, knew that I had 16 steps to climb to get up to my sleeping area upstairs."

Have you ever met Vincent?

Tips for care providers and leaders:

1. **Identify potentially vulnerable older patients and adhere to geriatric Emergency Department guidelines. Even simple modifications are useful.**
2. **Orient vulnerable older patients when you meet them.**
Vincent was very confused about his interactions with ED staff. Proper orientation with each staff member might have avoided confusion and reduced his risk for delirium.
3. **Ask vulnerable older patients what their biggest concern is - prioritize and address their main concern.**
The ED staff may have avoided a lot of anxiety for Vincent if they discovered that he was concerned about stairs in his home. They might have been able to easily address his concern by explaining that physiotherapy support was being provided.
4. **Try to limit duplicated patient questions and assessments.**
Better team communication might have limited the amount of unnecessary or duplicate questions, helping to reduce Vincent's confusion.
5. **Vulnerable older patients should have an easily-understandable discharge summary given to them before being sent home, including any new medication prescribed, any follow-up appointments that have been scheduled or referrals made (with whom, when, etc.), and any other instructions.**
Vincent could not remember his medication instructions and follow-up detail with home care. A written summary might have avoided the confusion and would reduce the risk of a medication-related event.

Thanks to CPSI, CCAC, the HNHB LHIN ED Directors' Steering Committee for their support.

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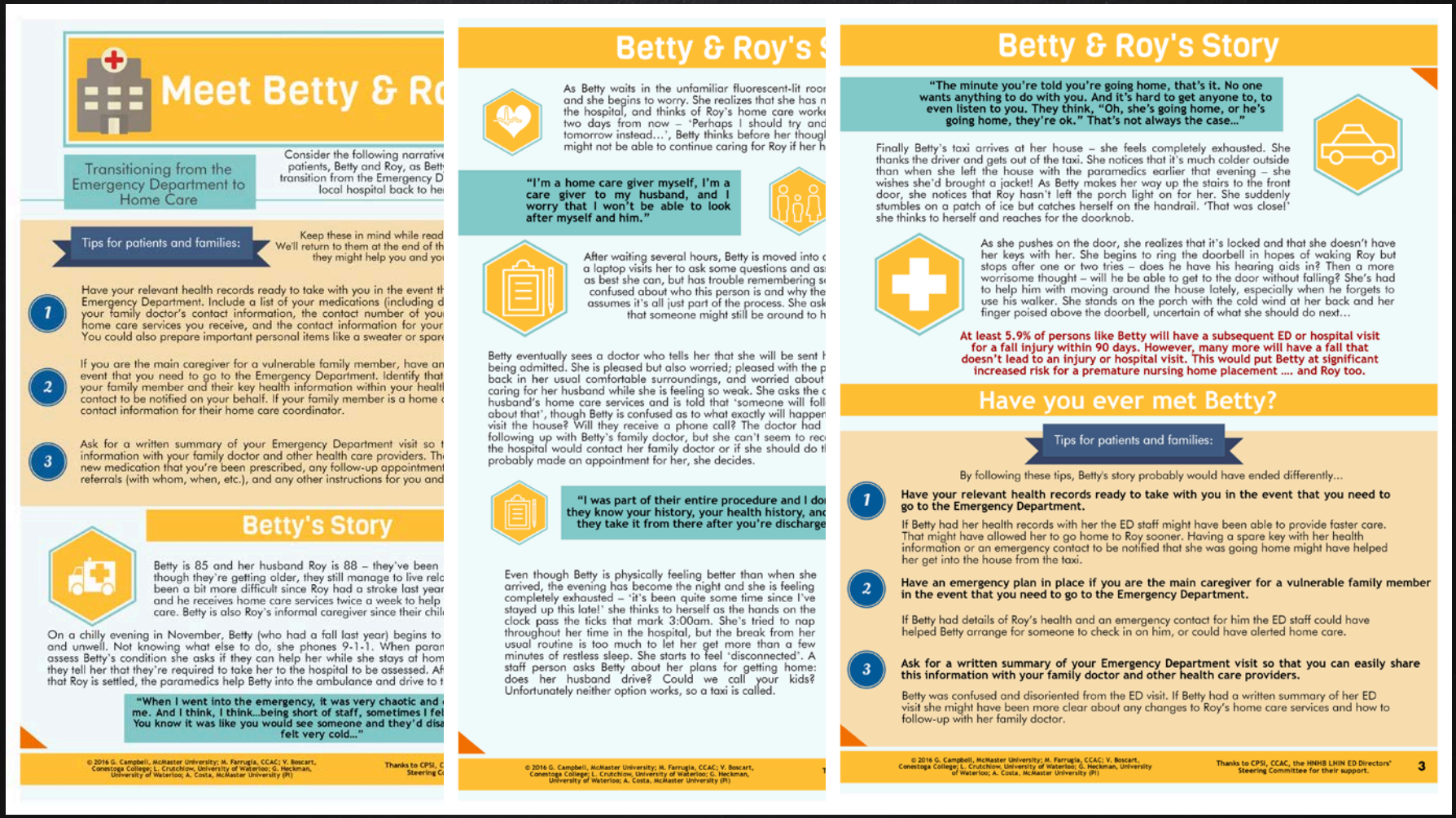

Meet Betty & Ro

Transitioning from the Emergency Department to Home Care

Consider the following narrative
patients, Betty and Roy, as Bett
transition from the Emergency D
local hospital back to he

Tips for patients and families:

Keep these in mind while read
We'll return to them at the end of th
they might help you and yo

1. Have your relevant health records ready to take with you in the event t
Emergency Department. Include a list of your medications (including d
your family doctor's contact information, the contact number of you
home care services you receive, and the contact information for your
You could also prepare important personal items like a sweater or spar

2. If you are the main caregiver for a vulnerable family member, have an
event that you need to go to the Emergency Department. Identify that
your family member and their key health information within your healt
contact to be notified on your behalf. If your family member is a home
contact information for their home care coordinator.

3. Ask for a written summary of your Emergency Department visit so t
information with your family doctor and other health care providers. Th
new medication that you're been prescribed, any follow-up appointment
referrals (with whom, when, etc.), and any other instructions for you and

Betty's Story

Betty is 85 and her husband Roy is 88 – they've been
though they're getting older, they still manage to live rela
been a bit more difficult since Roy had a stroke last year
and he receives home care services twice a week to help
care. Betty is also Roy's informal caregiver since their chil

On a chilly evening in November, Betty (who had a fall last year) begins to
and unwell. Not knowing what else to do, she phones 9-1-1. When param
assess Betty's condition she asks if they can help her while she stays at hom
they tell her that they're required to take her to the hospital to be assessed. Af
that Roy is settled, the paramedics help Betty into the ambulance and drive to t

"When I went into the emergency, it was very chaotic and
me. And I think, I think...being short of staff, sometimes I fe
You know it was like you would see someone and they'd disa
felt very cold..."

Thanks to CPSI, C
Steering C

Betty & Roy's S

As Betty waits in the unfamiliar fluorescent-lit roo
and she begins to worry. She realizes that she has n
the hospital, and thinks of Roy's home care worke
two days from now – 'Perhaps I should try and
tomorrow instead…', Betty thinks before her thoug
might not be able to continue caring for Roy if her h

"I'm a home care giver myself, I'm a care giver to my husband, and I worry that I won't be able to look after myself and him."

After waiting several hours, Betty is moved into
a laptop visits her to ask some questions and as
as best she can, but has trouble remembering s
confused about who this person is and why the
assumes it's all just part of the process. She ask
that someone might still be around to h

Betty eventually sees a doctor who tells her that she will be sent h
being admitted. She is pleased but also worried; pleased with the p
back in her usual comfortable surroundings, and worried about
caring for her husband while she is feeling so weak. She asks the
husband's home care services and is told that 'someone will foll
about that', though Betty is confused as to what exactly will happen
visit the house? Will they receive a phone call? The doctor had
following up with Betty's family doctor, but she can't seem to rea
the hospital would contact her family doctor or if she should do t
probably made an appointment for her, she decides.

"I was part of their entire procedure and I do
they know your history, your health history, an
they take it from there after you're discharge

Even though Betty is physically feeling better than when she
arrived, the evening has become the night and she is feeling
completely exhausted – 'it's been quite some time since I've
stayed up this late!' she thinks to herself as the hands on the
clock pass the ticks that mark 3:00am. She's tried to nap
throughout her time in the hospital, but the break from her
usual routine is too much to let her get more than a few
minutes of restless sleep. She starts to feel 'disconnected'. A
staff person asks Betty about her plans for getting home:
does her husband drive? Could we call your kids?
Unfortunately neither option works, so a taxi is called.

Betty & Roy's Story

"The minute you're told you're going home, that's it. No one wants anything to do with you. And it's hard to get anyone to, to even listen to you. They think, "Oh, she's going home, or he's going home, they're ok." That's not always the case..."

Finally Betty's taxi arrives at her house – she feels completely exhausted. She thanks the driver and gets out of the taxi. She notices that it's much colder outside than when she left the house with the paramedics earlier that evening – she wishes she'd brought a jacket! As Betty makes her way up the stairs to the front door, she notices that Roy hasn't left the porch light on for her. She suddenly stumbles on a patch of ice but catches herself on the handrail. 'That was close!' she thinks to herself and reaches for the doorknob.

As she pushes on the door, she realizes that it's locked and that she doesn't have her keys with her. She begins to ring the doorbell in hopes of waking Roy but stops after one or two tries – does he have his hearing aids in? Then a more worrisome thought – will he be able to get to the door without falling? She's had to help him with moving around the house lately, especially when he forgets to use his walker. She stands on the porch with the cold wind at her back and her finger poised above the doorbell, uncertain of what she should do next…

At least 5.9% of persons like Betty will have a subsequent ED or hospital visit for a fall injury within 90 days. However, many more will have a fall that doesn't lead to an injury or hospital visit. This would put Betty at significant increased risk for a premature nursing home placement …. and Roy too.

Have you ever met Betty?

Tips for patients and families:

By following these tips, Betty's story probably would have ended differently…

1. **Have your relevant health records ready to take with you in the event that you need to go to the Emergency Department.**
If Betty had her health records with her the ED staff might have been able to provide faster care. That might have allowed her to go home to Roy sooner. Having a spare key with her health information or an emergency contact to be notified that she was going home might have helped her get into the house from the taxi.

2. **Have an emergency plan in place if you are the main caregiver for a vulnerable family member in the event that you need to go to the Emergency Department.**
If Betty had details of Roy's health and an emergency contact for him the ED staff could have helped Betty arrange for someone to check in on him, or could have alerted home care.

3. **Ask for a written summary of your Emergency Department visit so that you can easily share this information with your family doctor and other health care providers.**
Betty was confused and disoriented from the ED visit. If Betty had a written summary of her ED visit she might have been more clear about any changes to Roy's home care services and how to follow-up with her family doctor.

Thanks to CPSI, CCAC, the HNHB LHIN ED Directors' Steering Committee for their support.

Download: https://bdg.mcmaster.ca/transedhc/

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Implications

1. **<u>All</u>** home care clients, or those referred to home care, should be considered as ‘high risk’ for an adverse patient safety events.

2. EDs and home care should initiate a staff awareness campaign (perhaps use the Narrative Fact Sheets)

3. Quality improvement projects and experimental studies should be conducted to test specific patient safety strategies on adverse patient safety events.

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HealthCareCAN
Leading. Innovation. Together.

SoinsSantéCAN
Leadership. Innovation. Collaboration.

PATIENTS FOR PATIENT SAFETY CANADA
PATIENTS POUR LA SÉCURITÉ DES PATIENTS DU CANADA

thanks!

Any questions?

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