Ronayne, Bruce HLTH:EX

From: Mackenzie, Isobel HLTH:EX
Sent: Thursday, July 26, 2018 8:59 AM
To: Mackenzie, Isobel HLTH:EX; 'kim.mcgrail@ubc.ca'
Subject: Res Care transfer 1528 (3)
Attachments: Res Care transfer 1528 (3).docx

Hi Kim:

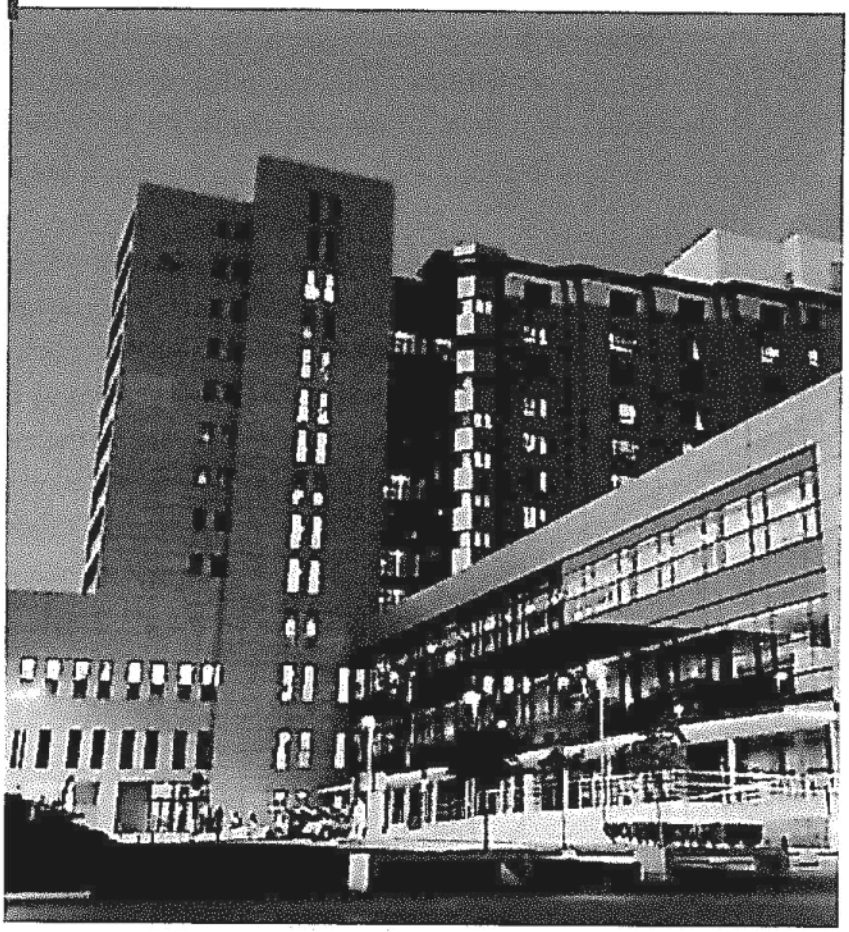
You will see that I have changed some of the language to make it a little more consumer friendly as the audience for this report is the public versus the health authorities only. The only numbers I have changed is, rather than use the lowest cost for hospital day stays, I have averaged between the $800-$1200 and come up with $1000.

If you can have a quick read and just ensure that, in changing some of the language I have not inadvertenly mis-stated a fact, I would appreciate it.

Safe travels.

Isobel

From Residential Care to the Hospital:A Pattern



APRIL 4, 2018

Seniors Advocate
Province of British Columbia

From Residential Care to the Hospital: A Pattern Emerges

Introduction

Since its inception the Office of the Seniors Advocate (OSA) has conducted research on various aspects of the residential care sector. In British Columbia, almost 28,000 seniors live in one of 293 publically subsidized residential care facilities, sometimes referred to as nursing homes. Residents of these facilities are generally the most frail and vulnerable members of the senior population.

All British Columbians are entitled to access a subsidized residential care bed and they are assessed both on their functional need to determine eligibility for admission and on their income to determine how much they will pay. The real cost of subsidized residential care ranges from $6000-$7000 per month. Residents however pay only 80% of their after tax income to a maximum capped rate of $3278 per month. Currently the average fee charges to residents is $1,685 per month. Thirty per cent of residents pay the minimum of $1,130 per month and only 7% pay the maximum capped rate of $3278. The cost of a non-subsidized private nursing home bed varies from $6500 to over $10,000 per month depending on the level of care required. Currently in BC, about 90% of all long term care beds are subsidized, leaving around 10% of beds fully paid by the resident. These private beds can be co-located in a facility that also has subsidized beds (approximately 100 private facilities have a combination of private and public beds) or the facility can be entirely devoted to privately funded residents. This report only includes those facilities that have subsidized beds.

Of the 293 publically subsidized care facilities in British Columbia approximately 30% are operated directly by the health authority with the majority, 70% operated by private care providers under a contractual arrangement with the health authority.

There is often a great debate about the quality of care and cost differences between a publically operated facility and a privately operated facility. The Office of the Seniors Advocate collects numerous data and information on both public and private care homes in the province. For most quality indicators there is no statistically significant difference between private and public long term care facilities. On average private facilities do provide less physiotherapy, occupational therapy and recreation therapy than public facilities, however, they are funded on average for fewer hours of direct care and an accurate comparison cannot be made until the funding is equalized. We also know that private facilities have more substantiated complaints and reportable incidents but in the recent province wide satisfaction survey of all subsidized private and public care facilities in the province, there was no overall difference in the level of satisfaction and

quality of life indicators between those facilities operated by the health authority (public) and those facilities operated by the private sector.

There is one area however, with a significant, statistically different outcome between facilities that are publically operated and those that are operated by the private sector. Research indicates that, all things being equal, if you live in a **private** facility you are:

- **32% more likely** to be sent to the emergency department
- once at the emergency department you are **35% more likely** to be admitted as an inpatient
- once admitted your length of stay is **27% longer** than if you resided in a public facility
- your chance of not returning to your nursing home but instead reverting to an alternative level of care (ALC) patient are is **41 % higher** with an average length of stay as ALC of **15% longer** if you live in a private facility
- the likelihood of dying in the hospital after you have been sent to the emergency department is **20% higher** if you live in a private care facility versus a public care facility.

While private care facilities, on average, care for less complex residents than public facilities and they attract fewer funded hours of care , the results reported in this paper have corrected for these variations in funded levels of care and resident complexity (acuity).

The data show a consistent and persistent pattern across all measures related to the interaction of residential care and acute care of underperformance by the private residential care facilities in supporting the optimal outcome of reduced use of emergency departments and acute care hospital beds by seniors.

The importance of this is twofold. From the perspective of the public there is a need to reduce pressure on the hospital system given its high cost and congestion. From the perspective of the senior living in a residential care facility, any trip to the hospital presents a risk and should only be undertaken when necessary.

Background

To gain a greater understanding of the emergency department experience for seniors, the Seniors Advocate worked shifts alongside front line clinicians in a number of emergency departments across the province.

From this work, two major themes emerged and this paper addresses one of these. The first theme, which will be addressed in another report, relates to seniors living in their own homes in the community who could potentially have their time in hospital reduced with improved

community supports. The second theme, and the subject of this report, is the issue of transfer to the emergency department and subsequent admission to hospital of seniors who reside in long term care facilities.

While working shifts in six different emergency departments throughout BC, the Seniors Advocate heard a similar theme from front line clinicians. Many nurses and some physicians commented on the predictability of an emergency department transfer resulting in an admission to hospital based on the residential care facility in which the senior resided, rather than on the acuity of their condition. This led the OSA to examine whether in fact there was a pattern amongst facilities that could predict a greater likelihood of transfer to the emergency department or admission to hospital. The answer is "yes", there is a predictable persistent pattern with residents living in private facilities having a significantly greater likelihood of being sent to the emergency department; being admitted to the hospital ; staying longer in the hospital and dying in the hospital, than if the same senior resided in a publically operated facility.

Why does it matter how often a senior living in a long term care facility goes to the emergency department?

People who live in British Columbia's residential care facilities require care for a number of long-term chronic health conditions including diabetes, chronic obstructive pulmonary disease (COPD), high blood pressure, heart disease (including heart failure), and a variety of neurologic and other illnesses. Given the complexity of some residents it is reasonable to assume that a trip to the emergency department or stay in the hospital is to be expected. Indeed, we want to ensure that, if required and if it is the residents wish, they are transferred to the emergency department. However it is important to understand that an unnecessary trip to the hospital for a frail senior carries a risk often equal to the risk of not going to the hospital when necessary.

Any transfer to an emergency department or stay in the hospital is likely to be stressful most particularly for those with dementia, hearing or visual challenges, and those who may not understand why they are being transferred. The stresses are many, including transport in an ambulance, potentially long waits in an emergency department in order to see a physician, in-hospital transfers to diagnostic areas and more waiting to learn the plan of care, including if a decision is made for admission to hospital. Even when a decision is made to admit to hospital, the waiting continues, including long waits on stretchers in hallways with unfamiliar noises, unfamiliar people and staff rushing by. This can be frightening for almost anyone and even more so for frail and vulnerable seniors.

Hospitals are not designed to meet the needs of frail elderly people. With the loss of familiar routines, increased confusion and loss of movement and mobility related to extended periods of time in bed, frail seniors recover more slowly from illness and are more susceptible to the

unintended effects of hospitalization (skin breakdown, delirium and hospital-acquired infections). We know that up to 50% of frail seniors will experience a hospital acquired delirium or infection. This makes it all the more important to ensure that we are not unnecessarily transferring frail seniors from their care facility to the hospital and that, if the trip to the emergency department is necessary, that the senior returns to the familiar surroundings of their home in the care facility as soon as possible.

This isn't to suggest that care facility residents should never be sent to the emergency department or admitted to hospital. Sometimes urgent health issues arise that cannot be managed within the residential setting resulting in a transfer to an emergency department and an admission to acute care. However the data provide evidence of a systemic pattern that demonstrates one group of care facilities, those operated by the private sector, are sending more residents to the hospital than those facilities operated by the public sector, even after adjusting for staffing levels and resident acuity.

How did we approach this review?

Of the 293 subsidized residential care facilities in BC at the time of the review, 212 facilities were included in the study. These facilities represent 82% of all residential care beds in the province. The decision to include most, but not all residential care facilities was based on accessing the best available data for hospitals and emergency rooms - the Canadian Institute for Health Information (CIHI) National Ambulatory Care Reporting System (NACRS) and the Discharge Abstract Database (DAD). As not all hospitals in BC are reporting information to the CIHI NACRS database, we chose to focus in those geographic areas with hospitals reporting NACRS data. Those hospitals that were excluded were generally smaller hospitals in more remote parts of the province. Additionally we reviewed MDS RAI 2.0 datasets for those residents who experienced a transfer to the emergency department. This information, taken together, provided an interesting picture of the care facility transfer to emergency department patterns in BC, including information about the reason for transfers, transfers that result in admissions to acute care, and average lengths of stay in acute care if admitted from a care facility.

The 24 acute hospitals with NACRS data are urban hospitals and as a result the outcome of our analysis may not be applicable to rural areas. We reviewed data for resident transfers from the 212 care facilities whose pattern of transfers were to the 24 NACRS sites. Of the 212 care facilities included in the study, 24.5% (52 facilities) are health authority operated and 75.5% (160 facilities) are private facilities operating subsidized beds under contract with the health authority. We explored all available emergency department visit data and inpatient data for acute, unplanned hospitalizations (excluding admissions for elective and otherwise planned procedures). Additionally we reviewed the primary admitting diagnosis assigned in the hospital to understand

whether some reasons for transfer and admission were more common than others. In each of these data reviews we focused on the care facility population aged 65 or older because older persons make up most (about 94%) of the people living in care facilities. The remaining 6% are under age 65 and were excluded from our analysis.

A Trip to the Emergency Department

There are several reasons a resident may be transferred to the emergency department. Transfers may be for diagnostic services (lab and x-ray), for assessment by a physician for potentially treatable conditions (fracture, infection, stroke or heart attack), or for symptom management at end of life. The reasons for transfer range from less complex situations that may have potential to be more effectively managed within a care facility, to those requiring services and equipment only available in a hospital.

Across the province:

- Seniors in care homes go to the emergency department about 13,800 times per year. On average, 40% of seniors will go to the emergency department during their first year in the care home; 24% will have only one trip while 16% will go twice or more during their first year in the nursing home.

- 46% of residents who got to the emergency department are assessed as appropriate to admit as an in-patient to the hospital.

- About 15% of care facility to emergency department transfers are assessed on the Canadian Triage and Acuity Scale (CTAS) as "non-urgent" or "less-urgent." 3% are in need of resuscitation, and the vast majority of transfers fall within the "moderately urgent" criteria. Overall, care facility operator status (HA or contracted) demonstrates no difference in the CTAS scores for residents when they arrive in the emergency department.

- Funded direct care hours, either above or below the median of 3.11 direct care hours did not impact the rate of transfer to the emergency department, regardless of facility ownership.
- Residents with certain diagnoses are much more likely to be admitted to the hospital after being arriving at the emergency department. The most likely to be admitted diagnosis are: sepsis (95% admitted), hip fracture (94%), pneumonia (84%) and heart failure (80%). These four diagnoses alone make up 30% of all hospital admissions that come through the emergency department and are likely to be triaged as moderately urgent or higher.

- Nearly half (40%) of all care facility transfers are related to infections and injuries (20%), with most injuries consistent with a fall. Common infections include pneumonia and urinary tract infections, as well as sepsis. Injuries related to falls are most frequently femur/hip fractures and injuries to the head (which range from lacerations to more significant head injury).

Transfer to Emergency Private versus Public:

Private facilities have a 32% **higher** rate of transfer of residents to the emergency department than health authority operated facilities.

On the basis of a review of transfer to emergency department data alone it's difficult to explain why private facilities have a significantly higher rate of transfer to the emergency department overall. A review of RAI-MDS 2.0 data suggests resident acuity does not appear to be a factor or demonstrate a difference in the populations of public versus private facilities in BC. In fact private facilities have, on average, residents with less complexity and frailty than public facilities. The health authority operated sites have an 11% higher prevalence of residents with congestive heart failure (CHF) and a 7% higher prevalence of residents with a diagnosis of COPD than do contracted facilities—two of the most frequent reasons that residents are admitted to the emergency department.

The obvious reasons why private facilities might send more residents to the emergency department such as: they are more sick, there is less funded care, different licensing and regulatory standards do not apply. This leaves a number of possible factors. Staff skill mix for example. We do know that the actual number of funded care hours does not impact the pattern of transfer to the emergency department, however what we do not know with any certainty is the skill mix within those funded care hours. The relative use of RN,LPN's and care aides, the wage rates paid, the practices around providing relief and backfill for vacation and sick leave, the use of sub contracted care staff all may play a role and warrants further study. So to must we look at annual staff training and the overall clinical leadership and expert clinical supports provided in private versus public facilities.

Whatever the underlying cause, the result is that some residents who would have their symptoms addressed by the care staff in a public facility are instead sent to the emergency department if they live in a private care facility.

Decision to Admit as In-patient

Once a senior arrives at the emergency department, the next decision is whether or not to treat the senior for the presenting symptoms and send them back to the care facility or to admit them to the hospital as an in-patient. The reasons a resident may be admitted to acute care are wide

ranging; however, we know from our review of the emergency department transfer data that four primary conditions drive admission to hospital: infections (including sepsis), fractures, and chronic disease management (e.g. CHF, COPD). More importantly, research indicates that seniors in hospital are at risk of unintended consequences such as skin breakdown, loss of mobility and strength, increased confusion and delirium. Every hospital admission and every day in hospital increases the risk of unintended consequences for the frail elderly.

Hospital admissions – the provincial perspective

- Seniors in care facilities are hospitalized over 8,000 times per year, or approximately 17 admissions per day across the province;

    - About 1 in 8 residents admitted to the hospital from the emergency department dies in the hospital.

    - 75% of care facility residents admitted to the hospital are first seen in the emergency department, while 25% are not seen in the emergency department but admitted directly to a hospital bed. Most of these direct admissions (almost 90%) are "elective" (planned) and are for scheduled procedures or other medical treatments or tests requiring hospital admission. These elective admissions were excluded from our analysis.

    - The most common reason for a care facility resident to be admitted to the hospital include pneumonia (13%), fracture of femur/hip (11%), urinary system disorders including urinary tract infections (UTIs) (8%), and lung conditions including chronic obstructive pulmonary disease (5%).

    - The most common diagnoses for those care facility residents who die in hospital are pneumonitis and pneumonia (together 1 in 5 deaths), sepsis, CHF, COPD, and hip fractures.

    - Very rarely (2.7% of acute admissions) the resident is unable to return to their facility at discharge from hospital, and as a result is classified as Alternate Level of Care (ALC) in hospital. This is equivalent to approximately 216 residents per year in BC hospitals.

    - The average length of stay for care facility resident admitted to the hospital is 7.9 days; and for those who experience an extended hospital stay and/or are not able to return to their residential care facility, ALC status adds almost three weeks to a hospital stay.

    - Facilities with funded direct care hours of greater than 3.11 hours (the median) per resident per day were less likely (4%) to be admitted to hospital following transfer to

emergency department when compared to facilities where funded direct care hours were at or below 3.11 hours

Decision to Admit: Private versus Public

The major impetus for this research project was the fairly consistent frustration expressed by many front line clinicians in the emergency department that some care homes were sending their residents to the emergency department too frequently and refusing to accept them back in a timely manner.

The data do support the first observation that private care facilities are sending residents to the emergency department more frequently than public facilities even though they care for less complex and frail residents. The data also support the observation of some clinicians that, all things being equal, the private care facilities are not accepting the residents back to the facility, the place residents call home, as quickly as the public facilities resulting in longer lengths of stay, higher conversion to alternative levels of care (ALC) and higher rates of death. The data specifically demonstrate:

- Private facility residents have a **35% higher** hospitalization rate from the emergency department than residents in publically operated facilities
- Private facility residents have hospital lengths of stay rates that are **27% longer** than residents from public facilities experience. As a result, private facilities have total hospital days that are 68% greater than health authority operated facilities.
- Residents from a private facility are almost **twice as likely** to experience an extended length of stay resulting in ALC status.
- Residents from private facilities have ALC lengths of stay that are **15% longer** (almost 7 days longer) than residents from a publically operated facility.
- Residents from private facilities that are transferred to the emergency department are 20% more likely to die in the hospital before they are ever returned home or transferred to another facility.
- Residents from private facilities have more admissions to hospital for certain conditions, even though they have a lower prevalence of the condition:
    - COPD - 62% higher rate of admission but 7% lower prevalence
    - CHF - 49% higher rate of admission but an 11% lower prevalence
    - Pneumonias – 40% higher

These data indicate is that there is a significant potential for reducing costs in our health care system if private facilities performed as well as public facilities in relation to emergency department transfer, hospital admission and hospital discharge.

Why Are Private Facilities Underperforming?

Trying to pinpoint the exact reason for the underperformance of the private care facilities is difficult and indeed it is likely multifactorial. Clearly the persistence of the pattern at every possible measure: transfer, admission, length of stay, conversion to ALC and death in hospital demonstrating inferior outcomes for the private facilities versus the public facilities raises a number of questions.

We know that on average, wages are less in private facilities, does this make a difference? Are private facilities attracting either lower skilled or less experienced care staff who lack the skills or confidence to handle some clinical needs at the facility level and as a consequence are more quick to send residents to the emergency department.

Are private facilities staffing to the funded levels of care? We know the funded hours of care, but we do not know if the funded hours of care are the actual hours of care being delivered.

Have we properly aligned the financial incentives for the private care homes to ensure optimal care and outcome for the residents? We know that private facilities are permitted to pay less in wages for care staff then they are funded to pay and they are allowed to keep the difference, is this the best way to ensure experienced and properly skilled staff can attend to residents clinical needs. We know that private care facilities continue to get funded for the bed that has been vacated by the resident that has gone to the emergency department or been admitted to hospital have we created an incentive for the private facility to send the resident to the emergency department and resist the residents quick return to the facility?

Why does this matter?

The rate of transfer to emergency, rate of admission to hospital and length of stay in hospital for individuals in residential care has both a human and healthcare system cost. The cost to a resident cannot be understated in terms of distress at transfer to hospital and neither can the well-documented impacts of an acute care hospital stay for the frail elderly. Additionally, family members experience stress as they endeavor to communicate their family member's story and wishes to a myriad of clinicians in the acute care system. The system impacts of grid-locked hospitals is significant, and it too results in both human and healthcare system costs as staff struggle to provide quality care in an overburdened hospital.

Consider the potential system savings if private residential care facilities achieved the same level of success as the public care facilities in relation to hospitalization of residents.

Estimated costs (Health System Matrix database):

- An emergency department visit in BC is approximately $470
    - Potentially avoidable emergency department visits (private facilities) 1,700 annually
        - Total cost savings: **$799,000 annually**

- In-hospital cost per day ranges from $800 - $1,200
    - Potentially avoidable admissions (private facilities) approximately 800 annually
    - Average length of stay per admission from a contracted facility is 10 days
    - An average cost of $1000/day hospital cost
        - Total cost savings: **$8,000,000 annually**

- In-hospital cost per day ranges from $800 – $1,200
    - Potentially avoidable ALC status admissions in 261 admissions/year
    - Average length of stay for ALC status is 28 days for private facilties
    - An average cost of $1000/day hospital cost
        - Total cost savings: **$7,308,000 annually**

- Total inpatient hospital days potentially saved
    - 800 admissions x 10 days length of stay = 8,000 days
    - 261 admissions x 28 days length of stay = 7,308 days
        - Total savings of **15,481 days or 42 hospital beds/day**

Total potential savings of $16,107,000 and 42 hospital beds per day in BC.

The ALC (care facility) population is unique among ALC populations in that these individuals are already known to the system, have been assessed as meeting the criteria for admission to residential care, have an assigned residential care bed, and have care needs that are well-documented. The question to consider then is why a care facility individual would attract ALC status, rather than be returned to their residential care facility with augmented service, either until recovery or until an alternate service is available?

Remaining in hospital for 21 days (the BC average), or in the case of private facilities an average of 28 days, is essentially occupying both a care facility bed and an acute bed. Challenges with congestion in our acute system strongly suggest that innovation in short term higher acuity resource allocation should be considered. An example of this could be directing home health RN resources to coach and support residential care nursing staff with technical skill tasks that occur infrequently in the care facility setting. Other opportunities could explore consultation from Respiratory Tech services to assess changes in condition for individuals with COPD and assist in symptom management strategies (as an example).

Overall, improving the rate of hospital transfer, admission and reducing the ALC length of stay indicates that approximately $16 million dollars could be re-targeted annually to other key health priorities. This is an estimated cost savings, and does not include impacts such as hospital congestion and overtime costs.

Recommendation:

Everyone who works in the care community whether in a private or public institution goes to work each day thinking they are delivering the best care possible. No one wants to believe that they are influenced by anything other than what is in the best interest of the senior. However, this report highlights that when looking objectively at the data, a discussion about why are we seeing such a consistent and persistent pattern needs to be had. It cannot be explained by funded care hours, client acuity or different licensing standards, there is something about the culture of care in the private facilities that is driving this pattern and we need to identify and address it. Reducing hospitalization of seniors is a goal that is gaining increasing profile and for good reason... it benefits both the senior and the taxpayer.

For this reason, a coordinated effort amongst the health authorities to look at this issue should be seen as a priority and it is recommended that the Ministry of Health assist in steering this collaborative effort and publically report the findings.

APPENDIX A

About the data:

- Four fiscal years: from April 1, 2012 to March 31, 2016.
- Resident characteristics and facility size and urban/rural status, including facility admission and discharge dates and the reason for discharge, are from the Continuing Care Reporting System (CCRS). All care facilities in BC are required to submit information to CCRS.
- Funded direct care hours and ownership were compiled from data submitted to the Office of the Seniors Advocate by BC health authorities.

- Emergency department visits: We looked at hospital admissions among all care facilities to the acute hospitals that report to the National Ambulatory Care Reporting System (NACRS). Since hospitals tend to admit from the their own emergency departments, this provided a way to select those care facilities (212) that transfer to NACRS hospitals only and are therefore properly represented in the emergency department data. NACRS is complete for all hospitals from April 1, 2014 to March 31, 2016 only, so the emergency department analysis is restricted to this time period of two fiscal years.

- Hospitalizations: All hospitals are required to submit to the Discharge Abstract Database (DAD).

- The Canadian Institute for Health Information (CIHI) administers the CCRS, NACRS, and DAD and provides BC's data to the BC Ministry of Health, who in turn made the necessary data available. Personally identifying information, like date of birth and personal health number, was removed, and resident and facility identifiers were replaced with anonymized codes that supported linkage of records across datasets.

Contact Us

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Open Monday to Friday [8:30-4:30]

Translation services available in more than 180 languages.

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OFFICE OF THE
SENIORS ADVOCATE
BRITISH COLUMBIA

Ronayne, Bruce HLTH:EX

From: Mackenzie, Isobel HLTH:EX
Sent: Thursday, October 25, 2018 4:18 PM
To: Ronayne, Bruce HLTH:EX
Subject: FW: Contracted Care Home Operators_Ref_315000_ Aug 3_ 18 (2)

From: Cook, Heather G HLTH:EX
Sent: Saturday, August 4, 2018 6:06 AM
To: Mackenzie, Isobel HLTH:EX
Cc: McGrail, Kimberlyn; Jeff Poss
Subject: Re: Contracted Care Home Operators_Ref_315000_ Aug 3_ 18 (2)

Hello Isobel

I don't have access to the level of detail in the methodology, however I think this is a good letter, provides information that demonstrates the effort to review the data, and highlights the intent of improving seniors quality of care.

I think that the majority of providers will see that the data speaks to the differences between provider types, however whether this changes their perspective or not remains to be seen.

Thank you
Heather C

Sent from my iPhone

On Aug 3, 2018, at 4:42 PM, Mackenzie, Isobel HLTH:EX <Isobel.Mackenzie@gov.bc.ca> wrote:

> This letter is being sent directly to call contracted care homes tomorrow morning. I am also going to add an updated appendix to the report that be a detailed methodology and change some wording slightly in the report to reflect the 82% only applies to the emergency room visits and that data from all hospitals was used for admissions, LOS , ALC and death. I realize the report reads like the 82% is for all aspects of the report, versus just the ED admissions.
>
> Isobel
> PS- If anyone finds a glaring error, please let me know.
>
> <Contracted Care Home Operators_Ref_315000_ Aug 3_ 18 (2).docx>

Ronayne, Bruce HLTH:EX

From: Mackenzie, Isobel HLTH:EX
Sent: Thursday, October 25, 2018 3:45 PM
To: Ronayne, Bruce HLTH:EX
Subject: FW: Contracted Care Home Operators_Ref_315000_ Aug 3_ 18 (2)

From: McGrail, Kimberlyn [mailto:kim.mcgrail@ubc.ca]
Sent: Tuesday, August 7, 2018 6:25 AM
To: Mackenzie, Isobel HLTH:EX; Cook, Heather G HLTH:EX; 'Jeff Poss'
Subject: RE: Contracted Care Home Operators_Ref_315000_ Aug 3_ 18 (2)

Hi Isobel:

My apologies for not responding sooner - s.22
s.22

This is a great letter. I'll be interested to hear the response, and it's great to see using the report as a way to set up for the next analysis.

s.22

Kim

From: Mackenzie, Isobel HLTH:EX [Isobel.Mackenzie@gov.bc.ca]
Sent: Friday, August 03, 2018 4:42 PM
To: Cook, Heather G HLTH:EX; McGrail, Kimberlyn; 'Jeff Poss'
Subject: FW: Contracted Care Home Operators_Ref_315000_ Aug 3_ 18 (2)

This letter is being sent directly to call contracted care homes tomorrow morning. I am also going to add an updated appendix to the report that be a detailed methodology and change some wording slightly in the report to reflect the 82% only applies to the emergency room visits and that data from all hospitals was used for admissions, LOS , ALC and death. I realize the report reads like the 82% is for all aspects of the report, versus just the ED admissions.

Isobel
PS- If anyone finds a glaring error, please let me know.

OFFICE OF THE
SENIORS ADVOCATE
BRITISH COLUMBIA

Ref# 315000

August 3, 2018

Dear Contracted Care Home Operator

You may be aware that my office has recently released a report *From Residential Care to Hospital: A Pattern Emerges.* The report can be found on our website at www.seniorsadvocatebc.ca

It is never a pleasant experience to learn that we could be doing better. I know this personally as I was a contracted care operator for many years. However I also know that a commitment to continuous quality improvement requires that we acknowledge we are never getting everything perfect all the time.

I can appreciate that as a contracted care provider you believe you are providing the best possible care for your residents. Indeed in many aspects of care quality, contracted care providers achieve levels of success that are equal to and in some cases exceed health authority owned and operated sites. However after comprehensive review of over 25,000 health records it was found that in the area of quality care that relates to hospitalization of residents, contracted care providers are not performing as well as public facilities and this is an area we should target for improvement .

The report that highlights these research findings has attracted some media attention, which I think reflects the fact it is an issue the public cares about. From the various comments on the report it appears most people have grasped the methodology and underlying statistical principles of reporting likelihood. However some comments on the report highlight the methodology may not have been explained clearly enough within the body of the report.

Given that this report directly affects you, I wanted to take the time to write to you directly to provide you with a more robust description of the methodology of this report, to ensure that you can have confidence in the numbers.

This report was released by my office and the research was commissioned by my office, but the research itself was conducted by a team of independent academics and researchers from two different universities. Dr. Jeff Poss from the University of Waterloo and Dr. Kim McGrail from the University of BC independently validated the data and models used and they were supported by Lisa Ronald from UBC with Dr. Margaret McGregor serving as an additional independent peer reviewer.

.../2

The overall framework for the data was the Continuing Care Reporting System (CCRS). As you know, CCRS is the provincially mandated information reporting system for all care facilities, both public and private and it gathers information on admission data, episodes of care and links with the MDS RAI 2.0 resident assessments. The timeframe of CCRS data that was used was the four year period April 1 2012 to March 31 2016. The resident RAI assessments used in this study are obtained from the CCRS.

For the admission to emergency/hospital to be considered, the person being admitted needed to link to the CCRS as a resident of the care facility. Excluded from this data set were residents who experienced an admission to emergency/hospital within the first seven days of their residency in the facility.

The emergency room utilization data was obtained from examining the National Ambulatory Care Reporting System (NACRS). The NACRS is not used in some of the small remote hospitals and to ensure we had robust comparable data we limited our study to those facilities that fell within the catchment area of one of the 24 NACRS reporting hospital. This captured 82% of our residential care population. The data from NACRS was also limited to a two year period to ensure the widest reach of data. The time frame for the NACRS data is April 2014 to March 2016.

The NACRS data tells us who was admitted to the emergency department along with their presenting symptoms. Other general information such as age and sex are gathered at intake and captured in NACRS. In total, 22,062 admissions to ED were reviewed for this study.

The hospital admission data was obtained using the Discharge Abstract Database (DAD). The DAD is a national reporting standard that all hospitals in BC are required to report to. The DAD captures patient data on when they arrived, where they arrived from, where they are being discharged to, their overall length of stay and their ALC days. It also charts a patient's primary and other diagnosis.

Four years of DAD data were examined for the period of April 2012 to March 2016. Excluded from the analysis were planned admissions for scheduled diagnostics and procedures, these represented 25% of total admissions. This left a total of 24,248 admissions that were reviewed as part of this study.

Location of death examined 24,165 persons who were discharged, deceased from residential care, or who died in hospital, up to 14 days after discharge, between April 2012 and March 2016.

All these data are independent data, contributed by hospitals and residential care facilities to the Canadian Institute for Health Information (CIHI) who ensures overall data quality and integrity as part of national health reporting standards. CIHI provides it to the government of BC.

.../3

These data sources were used to construct three different models. The models are calibrated to level out differences that may confound the ability to fairly compare outcomes between facilities based on populations and funded hours of care. This allows us to say that for two residents who are the same in all the ways the measures can describe, but differ only in ownership, that this is the independent difference that ownership makes.

The first model looked at the risk of an ED visit, and adjusted for sex, age, care hours, facility size, and a validated measure of health instability associated with health decline, hospital use, and death (CHESS), in addition to ownership. It can be considered representative of the 212 facilities in the two years from April 2014 to March 2016.

The second model looked at the risk of hospital admission, and adjusted for age, sex, care hours, facility size, facility urban or rural, and the measure of health instability used in the ED model, in addition to ownership. It can be considered representative of all BC facilities in the four years from April 2012 to March 2016.

These models used multivariable proportional hazard regression, also known as Cox regression. The model employed a time varying covariate (CHESS score drawn from the MDS 2.0 assessment) as well as age, sex, facility size, urban/rural, and ownership as simultaneous independent adjustment factors. This regression produces estimates of hazard ratios of the independent adjustments, which represent the additional likelihood of the event when that factor (contracted ownership) is present, adjusting for all others in the model.

The third model looked at location of death: either in hospital or in the residential care facility. It adjusted for the same things as the second model and can be considered representative of all BC facilities in the four years from April 2012 to March 2016.

This model used the multivariable logistic regression among deaths in the sample, adjusting for the last measured CHESS score in addition to age, sex, facility size, urban/rural and ownership as simultaneous independent adjustment factors. Logistic regression produces odds ratios which are re-stated as risk ratios using the prevalence rate of the sample. In this way, the resulting risk ratio informs the additional likelihood of the event when that factor (contracted ownership) is present, adjusting for all others in the model.

A similar but less complete analysis of the issue of transfers to ED based on the type of ownership of the care facility was done reviewing 2005-2008 data. The results of this study were peer reviewed and published in the Canadian Journal on Aging (Nursing Home Characteristics Associated with Resident Transfers to Emergency Departments CJA 33 (1) 38048 (2014)).

.../4

This study looked only at transfers to emergency (not hospitalization or death) from Vancouver Coastal care homes and was not linked to CHESS scores or any other set of resident characteristics beyond age and sex.

The report also had less consistent data on direct funded hours of care. However, it showed surprisingly similar results with residents from contracted care homes being 37% more likely to go to the emergency department.

Our report poses a number of questions and I can appreciate they will make some of you uncomfortable. However we need to ask these difficult questions and get the answers to see if we can find a solution that will lead to improvement in hospital transfers and hospital deaths for seniors living in residential care.

I know that you all share my goal of ensuring that seniors living in our care facilities get the best possible care and that better care is achieved when there are fewer hospitalizations.

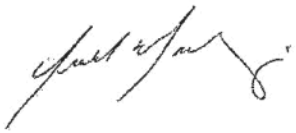
Over the next few months you will be asked for more information about your staffing. Wage rates, staff turnover, use of LPN versus RN and the method of RN oversight (on site versus remote) will likely be some of the data that will be requested. I thank you in advance for your assistance in this.

Once the information has been gathered and the analysis is completed, I will convene a conference call with all contracted care providers and present our findings before they are reported publically.

I thank you for taking the time to read this letter. If you have any other questions about the report, please feel free to contact me directly. I can be reached by email at isobel.mackenzie@gov.bc.ca or by phone at 250-952-2996.

I look forward to working with all of you as we seek solutions to enable positive change.

Sincerely,



Isobel Mackenzie
Seniors Advocate
Province of British Columbia

Marquis, Yvette HLTH:EX

From: Mackenzie, Isobel HLTH:EX
Sent: Thursday, November 1, 2018 12:01 PM
To: Marquis, Yvette HLTH:EX
Subject: FW: Can we conference call today at 3 pm?

-----Original Message-----
From: Mackenzie, Isobel HLTH:EX
Sent: Wednesday, August 29, 2018 8:28 AM
To: 'McGrail, Kimberlyn'; Jeff Poss
Cc: Cowan-Douglas, Rob J HLTH:EX; Marquis, Yvette HLTH:EX
Subject: RE: Can we conference call today at 3 pm?

Great - we will make it 4pm
Yvette, can you please set up conference call and get out details.
Jeff, working on document now, will send to you before 0900.
Isobel

-----Original Message-----
From: McGrail, Kimberlyn [mailto:kim.mcgrail@ubc.ca]
Sent: Wednesday, August 29, 2018 8:26 AM
To: Jeff Poss
Cc: Mackenzie, Isobel HLTH:EX; Cowan-Douglas, Rob J HLTH:EX; Marquis, Yvette HLTH:EX
Subject: Re: Can we conference call today at 3 pm?

4 should be good

> On Aug 29, 2018, at 8:24 AM, Jeff Poss <jwposs@uwaterloo.ca> wrote:
>
> OK with me.
>
> -----Original Message-----
> From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
> Sent: August-29-18 8:23 AM
> To: 'McGrail, Kimberlyn'; Jeff Poss
> Cc: Cowan-Douglas, Rob J HLTH:EX; Marquis, Yvette HLTH:EX
> Subject: RE: Can we conference call today at 3 pm?
>
> Does 4 or 4:30 work?
>
> -----Original Message-----
> From: McGrail, Kimberlyn [mailto:kim.mcgrail@ubc.ca]
> Sent: Wednesday, August 29, 2018 8:22 AM
> To: Jeff Poss
> Cc: Mackenzie, Isobel HLTH:EX; Cowan-Douglas, Rob J HLTH:EX; Marquis, Yvette HLTH:EX
> Subject: Re: Can we conference call today at 3 pm?
>

s.22

>
> Kim
>
>> On Aug 29, 2018, at 7:22 AM, Jeff Poss <jwposs@uwaterloo.ca> wrote:
>>
>> Yes, 3pm works for me.
>>
>> What progress can I contribute to on the script or slides before then?
>>
>> - Jeff
>>
>> -----Original Message-----
>> From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
>> Sent: August-29-18 6:54 AM
>> To: kim.mcgrail@ubc.ca; Jeff Poss
>> Cc: Cowan-Douglas, Rob J HLTH:EX; Marquis, Yvette HLTH:EX
>> Subject: Can we conference call today at 3 pm?
>>
>>
>>
>> Sent from my iPad

Ronayne, Bruce HLTH:EX

From: Mackenzie, Isobel HLTH:EX
Sent: Thursday, October 25, 2018 3:44 PM
To: Ronayne, Bruce HLTH:EX
Subject: FW: Data Tables
Attachments: slides_results.pptx

From: Jeff Poss [mailto:jwposs@uwaterloo.ca]
Sent: Wednesday, August 29, 2018 1:36 PM
To: Mackenzie, Isobel HLTH:EX
Subject: RE: Data Tables

Isobel – I've made my picks from these for slides 5 and 6 in the attached. If there are additional/alternate findings you wish to highlight let me know.

From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
Sent: August-29-18 1:14 PM
To: Jeff Poss
Subject: FW: Data Tables

Jeff

Look at the attached Tbales, 1,4,7,8. I was thinking we might weave some of that in. I would recommend we take out the PFP and NFP columns and simply compare HA with all contracted.

From: Cook, Heather G HLTH:EX
Sent: Monday, August 27, 2018 4:30 PM
To: Mackenzie, Isobel HLTH:EX
Subject: Data Tables

Hello Isobel,

This document reflects the information from Jeff. No descriptor of the tables other than that provided by Jeff is included. No definitions are included of the
Information, and we can include that if you wish. Examples might be:

- HA/PFP/PNP,
- NACRS
- RC
- IP (inpatient)
- ED
- Hazard ratio
- CHESS
- Mean/median/average
- ALC
- LOS
- Logistic regression

- Covariates
- Adjusted odds ratio
- Risk ratio
- CPS

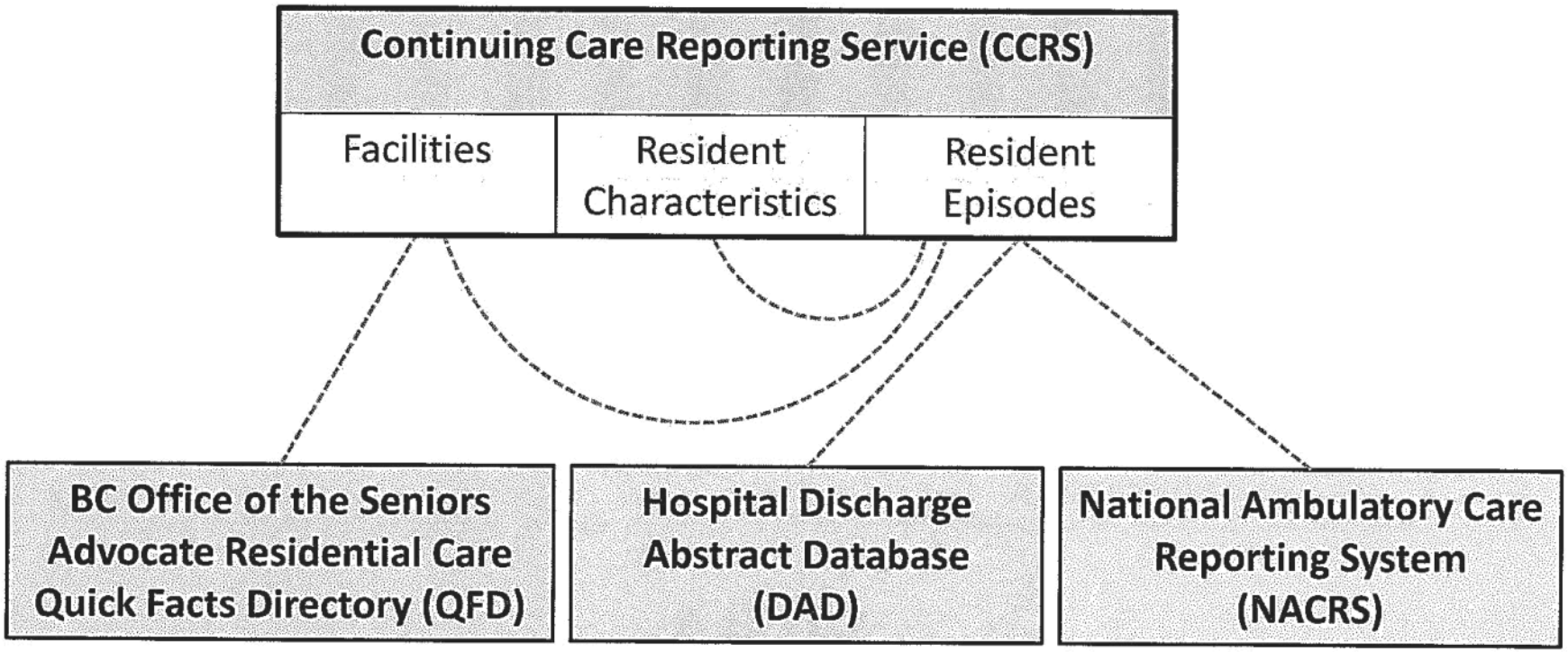
In discussion with Rob we have not included the 'report_fact_summary" spreadsheet because it is out of sync with Jeff's most recent document. This is the document that cross-walks the OSA report with Jeff's numbers. I'm not sure if it was your intent to distribute that.

Please let me know if you require additional information to accompany this report.

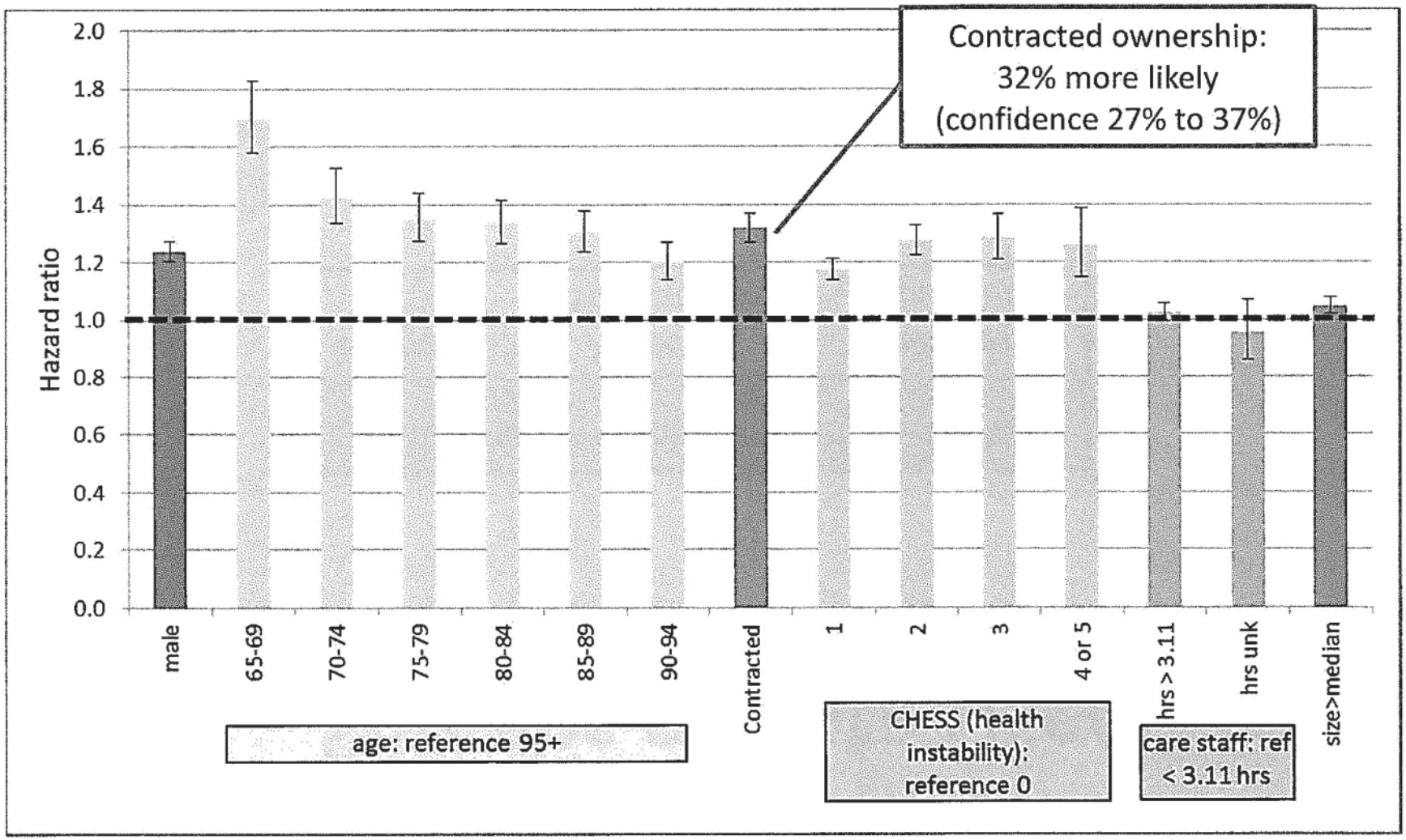
Thank you

Heather Cook, RN, MScN
Director, Systemic Review and Research
Office of the Seniors Advocate
Province of British Columbia
T: 1-778-698-9132
Heather.g.cook@gov.bc.ca

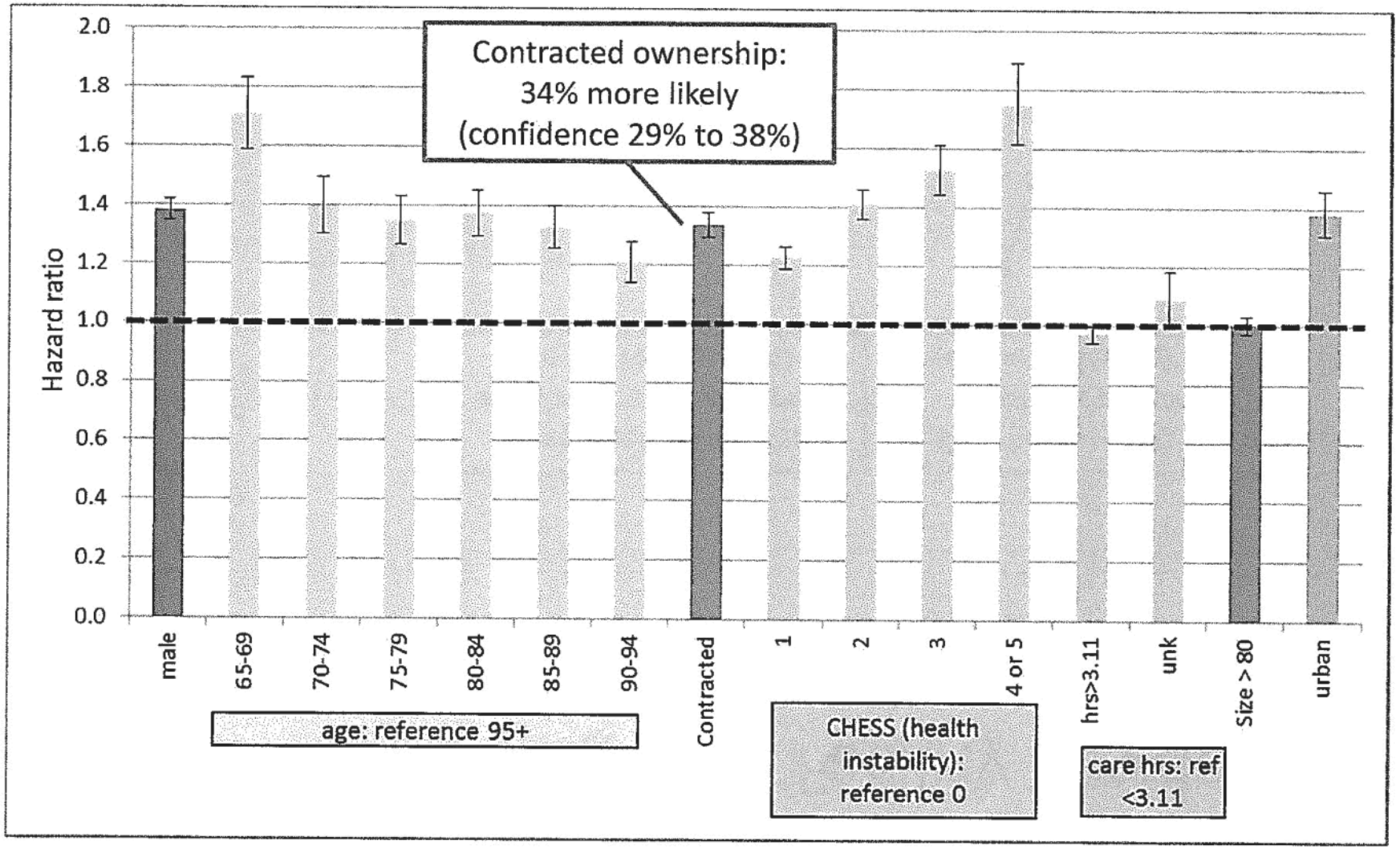
Sources of Data Used



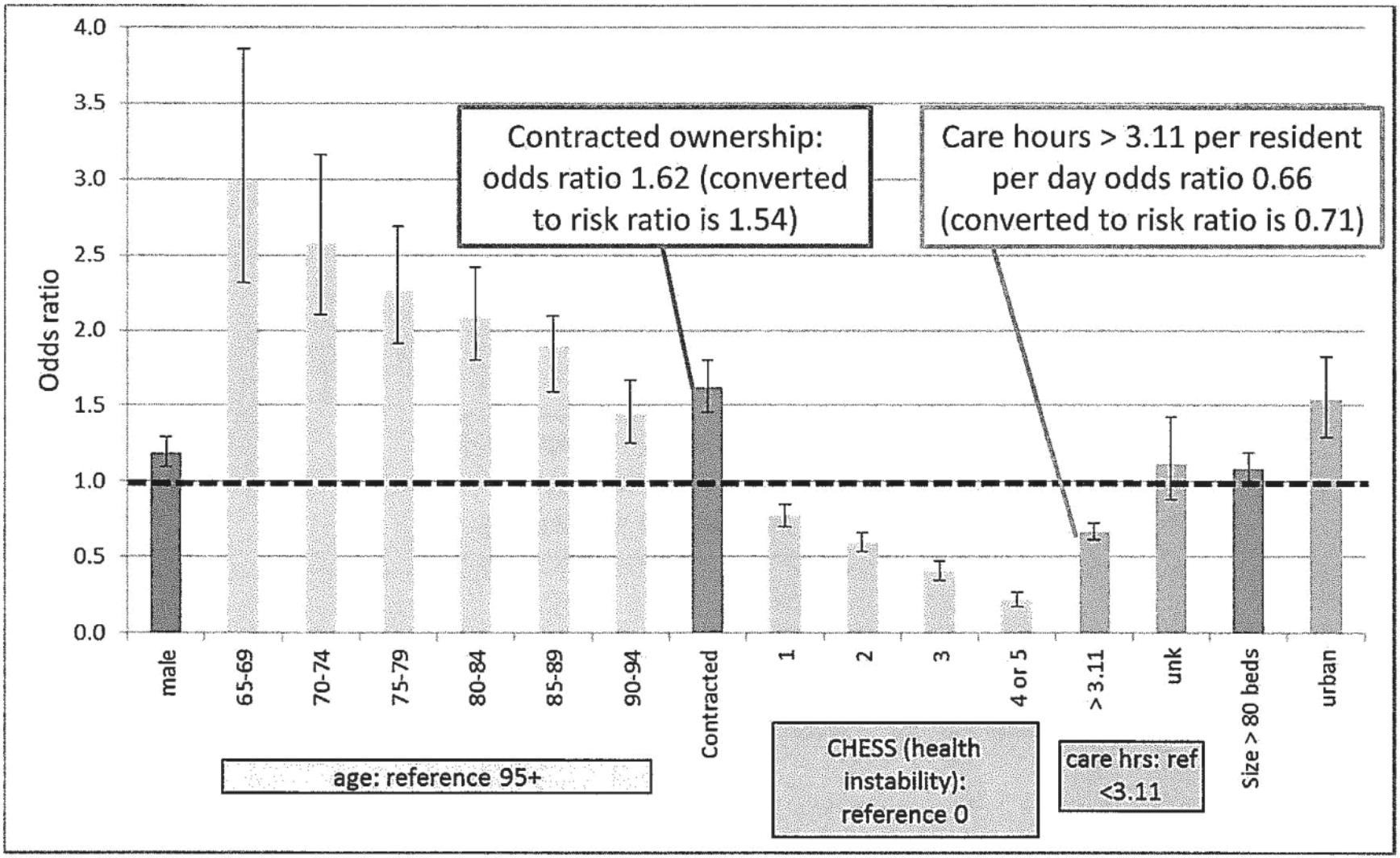
Model 1: Emergency Department Visits



Model 2: Hospital Admission



Model 3: Among Care Facility Residents who die, likelihood of dying in hospital



Unadjusted, selected findings

	Residents of facilities in:		Contracted is x% higher
	HA facilities	Contracted facilities	
Model 1: ED visits per 100,000 resident days of stay	131.4	169.4	29% (adjusted is 32%)
Model 2: Hospital admissions per 100,000 resident days of stay	59.0	79.6	35% (adjusted is 34%)
Model 3: Proportion of deaths in hospital	8.2%	14.8%	80% (adjusted is 54%)
Average length of stay, all admissions	5.7 days	7.6 days	32%
Hospitalization resulting in Alternate Length of Stay (ALC)	2.1%	2.9%	36%
ALC days per 100,000 resident days of stay	25.0	48.7	95%
Total hospital days per 100,000 resident days of stay	418	713	71%

Resident Characteristics

	Residents of facilities in:		Contracted is x% higher
	HA facilities	Contracted facilities	
Average age	85.4	86.1	
% female	67.8%	68.5%	
% CHESS 2+	23.4%	20.1%	-14%
ADL Hierarchy Scale 3+	73.5%	65.6%	-11%
Cognitive Performance Scale 3+	63.4%	62.8%	-1%
Emphysema/COPD prevalence	12.1%	11.3%	-7%
Hospital admissions other COPD, per 100,000 resident-days	*2.55*	*4.20*	*64%*
Heart failure prevalence	12.1%	10.8%	-11%
Hospital admissions with heart failure per 100,000 resident-days	*2.31*	*3.37*	*45%*

Cowan-Douglas, Rob J HLTH:EX

From: Jeff Poss <jwposs@uwaterloo.ca>
Sent: Tuesday, July 31, 2018 7:02 PM
To: Cowan-Douglas, Rob J HLTH:EX
Cc: Mackenzie, Isobel HLTH:EX
Subject: RE: FInal draft of Res Care to Hospital Transfer report
Attachments: EMB-SA-ResidentialCareTransfers-v7_JP.pdf

Thanks Rob, I've read through the report, it reads very well. I've made some comments in the pdf, some are more substantive than others, you can decide if the improvement in precision is worth the trade-off in clarity.

The only big thing I spotted was in the financial analysis, for the ALC days, see my lengthy comment. It looks like you presume to save all the ALC days that are occurring. I assume the base hospital admission is taken care of in the section above, and focus only on the ALC portion at the end, I then apply 2 steps:

1) fewer ALC events with the HA rate of prevalence applied to the contracted admissions – this saves the entire ALC portion at the HA average ALC LOS
2) among those ALC events that will continue to occur at the HA prevalence rate, a shorter LOS saves some additional hospital days

(there may be other ways to tease this out)

If you want to discuss any of this, I am around this evening after 8:30 or so, we could chat then. Tomorrow I could be available between 7am and 8am.

From: Cowan-Douglas, Rob J HLTH:EX [mailto:Rob.CowanDouglas@gov.bc.ca]
Sent: July-31-18 5:04 PM
To: Jeff Poss
Cc: Mackenzie, Isobel HLTH:EX
Subject: FInal draft of Res Care to Hospital Transfer report

Hi Jeff,

We've arrived at a finalized version of the report. Could you please give it a once-over to ensure we're talking about the right numbers in the right way? We are set for a 9 am release tomorrow am.

Appreciated!

Rob

Rob Cowan-Douglas | Economist
Office: 250.952.3038 | Fax: 250.952.2970

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SENIORS ADVOCATE
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PO Box 9651 STN PROV GOVT
Victoria BC V8W 2G2

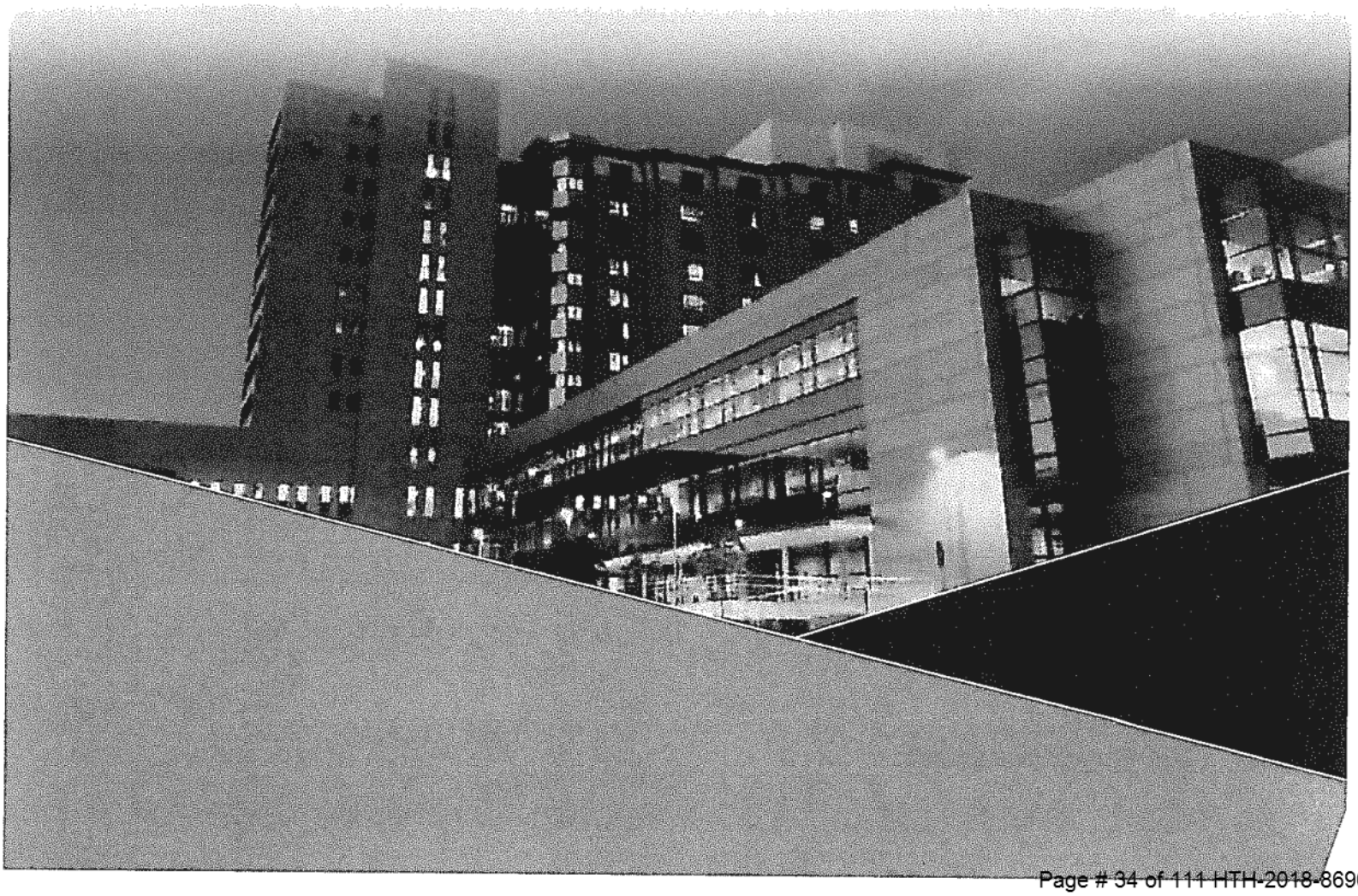
Toll Free: 1-877-952-3181
www.seniorsadvocatebc.ca

EMBARGOED

OFFICE OF THE
SENIORS ADVOCATE
BRITISH COLUMBIA

From Residential Care to Hospital:

An Emerging Pattern



OFFICE OF THE SENIORS ADVOCATE
BRITISH COLUMBIA

July 31, 2018

This report resulted from the feedback I received from emergency room clinicians. Working alongside front line staff in six different hospitals throughout the province, I heard a common complaint. Many felt that some care homes in their area were sending residents to the emergency department unnecessarily. This sparked the question *"what do the data tell us about who is going to the emergency department and is there a pattern that predicts a particular care home is more likely to call the ambulance?"*

In looking for an answer to the question, we found a rich repository of data and information that demonstrate a strong pattern of emergency department visits, hospitalization rates and death in hospital for a particular group of care homes based on the type of operator. If you are a resident living in a licensed care facility operated by a *contracted* provider versus one operated by a health authority, you are:

- **32% more likely** to be sent to the emergency department
- **34% more likely** to be hospitalized
- Your length of stay in hospital will be **32% longer**
- There is a **47% greater likelihood** that you will not return to the facility you came from and you will become an alternative level of care (ALC) patient
- **54% more likely** to die in the hospital

If contracted care facilities performed as well as health authority operated facilities, the health care system would:

- Save $16 million annually
- Increase capacity by freeing up 15,481 hospital beds each year
- Improve health outcomes for frail seniors via decreases in adverse events and hospital deaths

This is an important issue. Hospital congestion and costs are increasing and improving the care and quality of life for seniors in residential care is a goal we all want to achieve. Looking at the evidence to guide our efforts and focus our priorities will be the best path forward to needed systemic change.

I want to thank the many nurses and physicians in emergency rooms across the province who took the time to share their thoughts and observations with me, and I want to thank the OSA research team including Dr. Jeff Poss from the University of Waterloo and Dr. Kim McGrail from the University of British Columbia, the B.C. Ministry of Health and the Canadian Institute of Health Information for your data and analysis. I continue to be inspired by the many people who want to improve the lives of B.C. seniors.

Sincerely,

Isobel Mackenzie
Seniors Advocate
Province of British Columbia

From Residential Care to the Hospital: A Pattern Emerges

Introduction

Since its inception, the Office of the Seniors Advocate (OSA) has conducted research on various aspects of the residential care sector. In British Columbia, almost 28,000 seniors live in one of 293 publicly subsidized residential care facilities, sometimes referred to as nursing homes. Residents of these facilities are generally the most frail and vulnerable members of the senior population.

All British Columbians are entitled to access a subsidized residential care bed. You are assessed for eligibility based on a functional assessment, while a financial assessment determines how much you will pay. The real cost of subsidized residential care ranges from $6,000-$7,500 per month. Residents, however, pay only 80% of their after tax income, up to a maximum capped rate of $3,278 per month. Currently, the average fee charged to residents is $1,685 per month; 30% of residents pay the minimum of $1,130 per month and only 7% pay the maximum capped rate of $3,278.

Currently in B.C., about 90% of all long term care beds are subsidized. Private-pay beds can be co-located in a facility that also has subsidized beds (approximately 100 contracted facilities have a combination of private-pay and subsidized beds) or the facility can be entirely devoted to private-pay residents. This report excludes those facilities with no subsidized beds.

Of the 293 publicly subsidized care facilities in British Columbia, 32% of beds are in facilities operated directly by the health authority, while the majority (68%) of beds are in facilities operated by contracted care providers under a contractual arrangement with the health authority. The contracted care providers are an equal mix of not-for-profit organizations and private companies.

There is often debate about the quality of care and cost differences between a publicly operated facility and a contracted facility. The Office of the Seniors Advocate collects large amounts of data and information on both public and contracted care homes in the province. For most quality indicators, there is no statistically significant difference between contracted long term care facilities and those operated by a health authority. On average, contracted facilities do provide less physiotherapy, occupational therapy and recreation therapy than public facilities; however, they are funded on average for fewer hours of direct care and an accurate comparison of these therapy services cannot be made until the funding is standardized. We know that contracted facilities have more substantiated complaints and reportable incidents than public facilities, but in the recent province-wide satisfaction survey of all subsidized contracted and public care facilities in the province, there was no overall difference in the level of satisfaction and quality of life indicators between those facilities operated by a health authority (public) and those facilities operated by the contractors.

There is one area, however, with a statistically significant difference between facilities that are publicly operated and those that are operated by the contracted providers—emergency department use and hospitalization rates.

The OSA examined multi-year data for all subsidized care facilities in B.C. Of the 293 subsidized residential care facilities in B.C. at the time of the review, 212 facilities were included in the study. These facilities represent 82% of all residential care beds in the province. The decision to include most, but not all residential care facilities was based on accessing the best available data for hospitals and emergency rooms – the Canadian Institute for Health Information's (CIHI) National Ambulatory Care Reporting System (NACRS) and the Discharge Abstract Database (DAD). As not all hospitals in B.C. are reporting information to the NACRS database, we chose to focus on those geographic areas with hospitals reporting NACRS data. Those hospitals that were excluded were generally smaller hospitals in more remote parts of the province. Additionally, we reviewed interRAI MDS 2.0 datasets for those residents who experienced a transfer to the emergency department. The interRAI MDS 2.0 assessment is the functional assessment given to all residents on a quarterly and annual basis (as well as upon admission), and is used in all of B.C.'s subsidized residential care facilities. This information, taken together, provides an interesting picture of the care facility transfer to emergency department patterns in B.C., including information about the reason for transfers, transfers that result in admissions to acute care, and average lengths of stay in acute care if admitted from a care facility.

The 24 acute hospitals with NACRS data are urban hospitals and, as a result, the outcome of our analysis may not be applicable to rural areas. We reviewed data for resident transfers from the 212 care facilities whose pattern of transfers were to the 24 NACRS sites. Of the 212 care facilities included in the study, 25% (52 facilities) are health authority operated and 75% (160 facilities) are contracted facilities operating subsidized beds under contract with a health authority. We explored all available emergency department data and inpatient data for acute, unplanned hospitalizations (excluding admissions for elective and otherwise planned procedures). Additionally, we reviewed the primary admitting diagnosis assigned in hospital to understand whether some reasons for transfer and admission were more common than others. In each of these data reviews we focused on the care facility population aged 65 or older because older persons make up most (about 94%) of the people living in care facilities. The remaining 6% are under age 65 and were excluded from our analysis.

Summary of Comments on EMB-SA-ResidentialCareTransfers-v7_JP (3).pdf

Page: 2

Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-10-30 2:00:56 PM

Author: Jeff Subject: Sticky Note Date: 2018-07-31 5:48:13 PM

True for the ED results, but for hospitalization we used all facilities. I would suggest something like:" the outcome of our analysis for ED visits may not be applicable to rural areas; however outcomes for hospital admissions used DAD data which represents the entire province". Regarding NACRS, we reviewed data for resident transfers..."

EMBARGOED

The results of this research indicates that, all things being equal, if you live in a **contracted** facility, you are:

- **32% more likely** to be sent to the emergency department.
- **34% more likely** to be hospitalized.
- Once admitted, your length of stay is **32% longer.**
- Your chance of not returning to your nursing home but instead reverting to an alternative level of care (ALC) patient is **47% higher** and your average length of stay as ALC is **9% longer** .
- The likelihood of dying in the hospital is **54% higher** if you live in a contracted care facility versus a public care facility.

While contracted care facilities, on average, ca[1] less complex residents than public facilities and they have fewer funded hours of care, the results reported in this paper have corrected for these variations in funded levels of care and resident complexity (acuity).

The data show a consistent pattern of underperformance across standard measures of hospital utilization for residents by contracted residential care facilities.

The importance of this pattern is twofold. From the perspective of the public, there is a need to reduce pressure on the hospital system given its high cost and congestion. From the perspective of the senior living in a residential care facility, any trip to the hospital presents a risk and should only be undertaken when necessary.

Page: 3

Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 5:50:43 PM

it's most of the results, not sure if you want to make this fine distinction here, but could say something like "the main results reported in this paper"

Background

To gain a greater understanding of the emergency department experience for seniors, the Seniors Advocate worked shifts alongside front line clinicians in a number of emergency departments across the province.

While working shifts in six different emergency departments throughout B.C., the Seniors Advocate heard a similar theme from front line clinicians. Many nurses and some physicians commented on the predictability of an emergency department transfer resulting in an admission to hospital based on the residential care facility in which the senior resided, rather than on the acuity of their condition. This led the OSA to examine whether, in fact, there was a pattern among facilities that could predict a greater likelihood of transfer to the emergency department or admission to hospital. The answer is "yes," there is a predictable pattern, with a resident living in a contracted facility having a significantly greater likelihood, compared to that same resident residing in a publicly operated facility, of: being sent to the emergency department; being admitted to hospital; staying longer in hospital; and dying in hospital.

Why does it matter how often a senior living in a long term care facility goes to the emergency department?

People who live in British Columbia's residential care facilities require care for a number of long-term chronic health conditions, including diabetes, chronic obstructive pulmonary disease (COPD), high blood pressure, heart disease (including heart failure), and a variety of neurological and other illnesses. Given the complexity of many residents' care needs, it is reasonable to assume that a trip to the emergency department or a stay in hospital is to be expected. Indeed, we want to ensure that, if required and if it is a resident's wish, they are transferred to the emergency department. However, it is important to understand that a potentially avoidable trip to hospital for a frail senior carries a risk often equal to the risk of not going to the hospital when necessary.

Any transfer to an emergency department or stay in hospital is likely to be stressful, most particularly for those with dementia, hearing or visual challenges, and those who may not understand why they are being transferred. The stresses are many, including transport in an ambulance, potentially long waits in an emergency department in order to see a physician, in-hospital transfers to diagnostic areas and more waiting to learn the plan of care, including if a decision is made for admission to hospital. Even when a decision is made to admit to hospital, the waiting continues, including long waits on stretchers in hallways with unfamiliar noises, unfamiliar people and staff rushing by. This can be frightening for almost anyone and even more so for frail and vulnerable seniors.

Hospitals are not designed to meet the needs of frail elderly people. With the loss of familiar routines, increased confusion and loss of movement and mobility related to extended periods of time in bed, frail seniors recover more slowly from illness and are more susceptible to the unintended effects of hospitalization (skin breakdown, delirium and hospital-acquired infections).

We know that up to 50% of frail seniors will experience a hospital acquired delirium or infection. This makes it all the more important to ensure that we are not unnecessarily transferring frail seniors from their care facility to the hospital and that, if the trip to the emergency department is necessary, the senior returns to the familiar surroundings of their home in the care facility as soon as possible.

This isn't to suggest that care facility residents should never be sent to the emergency department or admitted to hospital. Sometimes, urgent health issues arise that cannot be managed within the residential setting, necessitating a transfer to an emergency department and an admission to acute care. However, the data provide evidence of a systemic pattern that demonstrates one group of care facilities—those operated under contract—are sending more residents to the hospital than those facilities operated by the public sector, even after adjusting for staffing levels and resident acuity.

A Trip to the Emergency Department

There are several reasons a resident may be transferred to the emergency department. Transfers may be for diagnostic services (lab and x-ray), for assessment by a physician for potentially treatable conditions (fracture, infection, stroke or heart attack), or for symptom management at end of life. The reasons for transfer range from less complex situations that may have potential to be more effectively managed within a care facility, to those requiring services and equipment only available in a hospital.

Across the Province

- Seniors in care homes go to the emergency department about 13,500 times per year. On average, 40% of seniors will go to the emergency department during their first year in the care home; 24% will have only one trip while 16% will go twice or more during their first year in the nursing home.
- 46% of residents who got to the emergency department are assessed as appropriate to admit as an in-patient.
- Funded direct care hours—either above or below the median of 3.11 direct care hours—did not impact the rate of transfer to the emergency department, regardless of facility ownership.
- Residents with certain diagnoses are much more likely to be admitted to hospital after arriving at the emergency department. The most likely to be admitted diagnoses are: sepsis (95% admitted), hip fracture (94%), pneumonia (84%) and heart failure (80%). These four diagnoses alone make up 30% of all hospital admissions that come through the emergency department and are likely to be triaged as moderately urgent or higher.
- Nearly half (40%) of all care facility transfers are related to infections and injuries (20%), with most injuries consistent with a fall. Common infections include pneumonia and urinary tract infections, as well as sepsis. Injuries related to falls are most frequently femur/hip fractures and injuries to the head (which range from lacerations to more significant head injury).

Page: 5

Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 5:52:10 PM

Considering the 212 homes in NACRS, could this be "In primarily urban areas:"

Number: 2 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:08:52 PM

I was vague in the report text, here are the exact numbers:
21.6% of ED visits had an infection-related diagnosis
21.2% had an injury diagnostic code, mostly falls
so total of 42.8% across the two

Transfer to Emergency: Contracted versus Public:

Contracted facilities have a 32% higher rate of transfer of residents to the emergency department than public, health authority operated facilities.

On the basis of a review of transfer to emergency department data alone, it's difficult to explain why contracted facilities have a significantly higher rate of transfer to the emergency department overall. A review of interRAI MDS 2.0 assessment data suggests resident acuity does not appear to explain the difference in transfer rates between public versus contracted facilities in B.C. In fact, contracted facilities have, on average, residents with less complexity and frailty than public facilities. The health authority operated sites have an 11% higher prevalence of residents with congestive heart failure (CHF) and a 7% higher prevalence of residents with a diagnosis of COPD than do contracted facilities—two of the most frequent reasons that residents are admitted to the emergency department.

The obvious reasons why contracted facilities might send more residents to the emergency department—such as, residents are more sick, there is less funded care, different licensing and regulatory standards—do not apply. This leaves a number of possible factors, such as staff skill mix. We do know that the actual number of funded care hours does not impact the pattern of transfer to the emergency department, but what we do not know with any certainty is the skill mix within those funded care hours. The relative use of RNs, LPNs and care aides, the wage rates paid, the practices around providing relief and backfill for vacation and sick leave, and the use of sub-contracted care staff all may play a role and warrant further study. So, too, must we look at annual staff training and the overall clinical leadership and expert clinical supports provided in contracted versus public facilities.

Whatever the underlying cause, the result is that, all things being equal, some residents who live in a contracted facility and would have had their symptoms addressed by the care staff in a public facility are instead sent to the emergency department.

Decision to Admit as In-patient

Once a senior arrives at the emergency department, a decision is made whether or not to treat the senior for the presenting symptom(s) and send them back to the care facility or to admit them to hospital as an in-patient. The reasons a resident may be admitted to acute care are wide ranging; however, we know from our review of the emergency department transfer data that four primary conditions drive admission to hospital: infections (including sepsis), fractures, and chronic disease management (e.g., CHF, COPD). More importantly, research indicates that seniors in hospital are at risk of unintended consequences such as skin breakdown, loss of mobility and strength, increased confusion and delirium. Every hospital admission and every day in hospital increases the risk of unintended consequences for the frail elderly.

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Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:11:24 PM
This is the correct number, and adjusts for age, sex, facility size, and the resident health instability

Hospital Admissions: The Provincial Perspective

- Seniors in care facilities are hospitalized around 8,000 times per year, or approximately 17 admissions per day across the province.
  - About 1 in 8 residents admitted to the hospital from the emergency department dies in hospital.
  - 75% of care facility residents admitted to hospital are first seen in the emergency department, while 25% are not seen in the emergency department but admitted directly to a hospital bed. Most of these direct admissions (almost 90%) are "elective" (planned) and are for scheduled procedures or other medical treatments or tests requiring hospital admission. These elective admissions were excluded from our analysis.
  - The most common reasons for a care facility resident to be admitted to hospital include pneumonia (13%), fracture of femur/hip (11%), urinary system disorders including urinary tract infections (UTIs) (8%), and lung conditions including COPD (5%).
  - The most common diagnoses for those care facility residents who die in hospital are pneumonitis and pneumonia (together 1 in 5 deaths), sepsis, CHF, COPD, and hip fractures.
  - Very rarely (2.7% of acute admissions) the resident is unable to return to their facility upon discharge from hospital, and as a result is classified as Alternate Level of Care (ALC) in hospital. This is equivalent to approximately 216 residents per year in B.C. hospitals.
  - The average length of stay for a care facility resident admitted to hospital is 7.9 days; and for those who experience an extended hospital stay and/or are not able to return to their residential care facility, ALC status adds almost three weeks to a hospital stay.
  - Facilities with funded direct care hours of greater than 3.11 hours (the median) per resident per day were less likely (4%) to be admitted to hospital following transfer to emergency department when compared to facilities where funded direct care hours were at or below 3.11 hours

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Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:12:45 PM

8000 divided by 365 is about 22

Number: 2 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:30:38 PM

The 2.7% is the proportion of non-elective admissions that become ALC, so the number here is more like 2.7% X 8000 X 76.4% = 165

Number: 3 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:17:09 PM

Yes, 4% is the number, and it adjusts for age, sex, ownership, size, urban, and health instability.

Decision to Admit: Contracted versus Public

The major impetus for this research project was the fairly consistent frustration expressed by many front line clinicians in the emergency department that some care homes were sending their residents to the emergency department too frequently and refusing to accept them back in a timely manner.

The data do support the first observation from emergency department clinicians that contracted care facilities are sending residents to the emergency department more frequently than public facilities, even though the data indicate they care for less complex and frail residents. The data also support the observation of some clinicians that, all things being equal, the contracted care facilities are not accepting the residents back to the facility as quickly as the public facilities, resulting in longer lengths of stay, higher conversion to alternative level of care (ALC) and higher rates of death in hospital. The data specifically demonstrate:

- Contracted facility residents have a **34% higher** hospitalization rate than residents in publicly operated facilities.
- Contracted facility residents have hospital lengths of stay that are **32% longer** than residents from public facilities experience.
- Residents from a contracted facility are almost **twice as likely (47%)** to experience an extended length of stay resulting in ALC status.
- Residents from contracted facilities have ALC lengths of stay that are **9% longer** (almost 7 days longer) than residents from a publicly operated facility.
- Residents from contracted facilities have more admissions to hospital for certain conditions, even though they have a lower prevalence of the condition:
  - COPD – 64% higher rate of admission but 7% lower prevalence
  - CHF – 48% higher rate of admission but an 11% lower prevalence
  - Pneumonias – 38% higher
- Residents from contracted facilities are **54% more likely** to die in hospital.

These data indicate there is a significant potential for reducing costs in our health care system if contracted facilities performed as well as public facilities in relation to emergency department transfer, hospital admission and hospital discharge.

Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:18:42 PM
an adjusted rate, the other rates in this list except for the 54% more likely to die in hospital, are unadjusted

Why Are Contracted Facilities Underperforming?

Trying to pinpoint the exact reason for the underperformance of the contracted care facilities is difficult and indeed it is likely multifactorial. With a pattern that is consistent for standard hospitalization measures—transfer, admission, length of stay, conversion to ALC and death in hospital each demonstrate statistically significant poorer outcomes for contracted facilities versus public facilities—the question of "why" inevitably comes to mind. In order to find the answer, we must first have the courage to ask difficult questions.

We know the pattern is not related to differences in the condition of the residents or the funded hours of care between public and contracted operators. We know that public and contracted facilities have the same rate (23.5%) of "do not hospitalize" (DNH) orders. We know that the pattern is sufficiently pervasive that it is not about an individual care provider. However, the decision to call the ambulance and the discussion with the physician or nurses at the hospital about the resident returning home is done by/with staff in the care home. What is it about the culture in contracted care homes that, on balance, makes the staff more likely to send someone to the hospital and more hesitant to support their return to the facility?

Continuity of care has been well researched as linking to better health outcomes, and this holds particularly true in reducing hospitalization. Knowing the resident and their conditions would certainly be helpful in determining when changes might require a trip to the hospital, but if staff is changing frequently, continuity of care is compromised. Do we see less continuity of staff in contracted facilities?

We know that in public facilities there is actually good continuity. The Health Employers Association of British Columbia (HEABC) reports that 84% of staff who worked in public care homes in 2017 also worked in that same care home in 2016; this data includes casuals. If casuals are excluded, the data show that 94% of regular staff are consistent year over year. Unfortunately, we do not have any comparable data on staff turn-over for contracted facilities. We do know that there is turn-over in some of the contracted facilities who contract their clinical staff from another company. Often referred to as "contract flipping," some facilities change companies they have contracted with to provide care and a mass lay off of workers may often be the result. Does this have an impact on continuity of care? Indeed, what about the practice of contracting out care in general— does this have an impact?

We know that, on average, contracted care facilities pay lower wages than public facilities. Only 54 out of 187 contracted facilities pay the funded wage rate and benefits of the master collective agreement ($23.95 per hour); the other facilities pay less, some of them much less (some are below $19 per hour). Is this attracting less experienced staff and/or is it adding to turn-over as care aides may seek opportunities for higher paying and/or more stable jobs in another facility? If care staff in all publicly funded facilities were required to receive comparable wages and benefits, would there be a more stable workforce?

What ongoing education and clinical support is available to care staff in contracted facilities? Is it different than what is provided in public facilities? Is there access to clinical nurse specialists and

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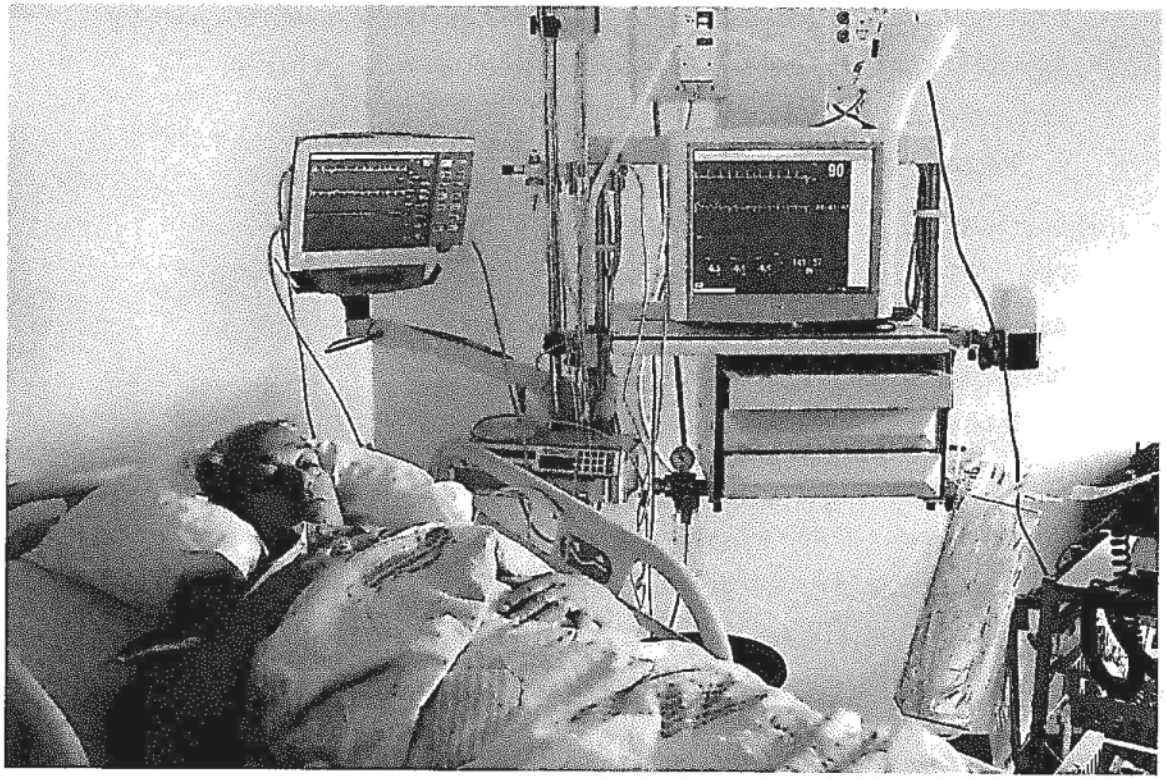
Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:20:54 PM
The similar DNH rates were in the 2011/2012 period when that information was being collected, and we presume it hasn't changed that much by ownership status since.

clinical educators? Are clinical staff supervised by an RN or an LPN? Does this make a difference?

Have we properly aligned the financial incentives for the contracted care homes to ensure optimal care and outcome for the residents? We know that contracted facilities are permitted to pay less in wages for care staff despite being funded to pay at a higher rate. Is this the best way to ensure continuity of care with experienced staff to attend to residents clinical needs? We know that contracted care facilities continue to be funded for a bed that has been vacated by a resident that has been admitted to hospital. Have we created an incentive for a contracted facility to send a resident to the emergency department and resist the resident's quick return to the facility?

These are some of the difficult questions we need to ask if we want to understand why residents from contracted facilities transfer to the emergency department and are hospitalized more frequently than those in public facilities. There is a problem—that is clear from the data—but we cannot find solutions if we do not understand what is causing the problem. Undoubtedly, some contracted care providers will be uncomfortable with some of these questions and fixing the problem may have a financial impact on the care home operators' profitability. However, fixing the problem may also bring the care home operators more resources that will allow them to improve the outcome of care for their residents, and that is a goal that we should all embrace.



Why does this matter?

The rate of transfer to emergency, admission to hospital, length of stay, conversion to ALC and dying in a hospital bed has both a human and healthcare system cost. The cost to a resident cannot be understated in terms of distress at transfer to hospital and neither can the well-documented impacts of an acute care hospital stay for the frail elderly. Additionally, family members experience stress as they endeavor to communicate their family member's story and wishes to a myriad of clinicians in the acute care system, and almost no one wants to die in hospital. The system impacts of grid-locked hospitals is significant, and it too results in both human and healthcare system costs as staff struggle to provide quality care in an overburdened hospital.

Consider the potential system savings if contracted residential care facilities achieved the same level of success as the public care facilities in relation to hospitalization of residents.

Estimated costs (Health System Matrix database):

- An emergency department visit in B.C. is approximately $470
  - Potentially avoidable emergency department visits (contracted facilities) 1,700 annually
    - Total cost savings: **$799,000 annually**
- In-hospital cost per day ranges from $800 - $1,200
  - Potentially avoidable admissions (contracted facilities) approximately 800 annually
  - Average length of stay per admission from a contracted facility is 10 days
  - An average cost of $1,000/day hospital cost
    - Total cost savings: **$8,000,000 annually**
- In-hospital cost per day ranges from $800 – $1,200
  - Potentially avoidable ALC status admissions in 261 admissions/year
  - Average length of stay for ALC status is 28 days for contracted facilities
  - An average cost of $1000/day hospital cost
    - Total cost savings: **$7,308,000 annually**
- Total inpatient hospital days potentially saved
  - 800 admissions x 10 days length of stay = 8,000 days
  - 261 admissions x 28 days length of stay = 7,308 days
    - Total savings of **15,481 days or 42 hospital beds/day**

Total potential savings of $16,107,000 per year and 42 hospital beds per day in B.C.

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Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:48:12 PM

See above there are probably 165 total ALC events per year, overall.
this appears to presume that all ALC events could be avoided. I applied the following analysis to get an estimate for contracted performing like HA:
rate of ALC among non-elective admissions is 0.77% higher (2.88% - 2.11%). On 4,460 non-elective admissions per year this would be 34 ALC cases avoided per year, and you would save the contracted ALC LOS of 19.6 days on each: 666 days. In addition if the 94 ALC cases in contracted facilities that would be expected have LOS at HA length, this would save 94 x (19.6 - 17.9) = 170 days. So a total of 666+170 = 826 hospital days

The ALC (care facility) population is unique among ALC populations in that these individuals are already known to the system, have been assessed as meeting the criteria for admission to residential care, have an assigned residential care bed, and have care needs that are well-documented. The question to consider, then, is why a care facility individual would attract ALC status, rather than be returned to their residential care facility with augmented service, either until recovery or until an alternate service is available?

Remaining in hospital for 21 days (the B.C. average)—or, in the case of contracted facilities, an average of 28 days—is essentially occupying both a care facility bed and an acute bed. Challenges with congestion in our acute system strongly suggest that innovation in short term higher acuity resource allocation should be considered. An example of this could be directing home health RN resources to coach and support residential care nursing staff with technical skill tasks that occur infrequently in the care facility setting. Other opportunities could explore consultation from Respiratory Tech services to assess changes in condition for individuals with COPD and assist in symptom management strategies (as an example).

Overall, improving the rate of hospital transfer, admission and reducing the ALC length of stay indicates that approximately $16 million dollars could be re-targeted annually to other key health priorities (this is an estimated cost savings, and does not include impacts such as hospital congestion and overtime costs).

Conclusion and Recommendation

Everyone who works in the care community, whether in a contracted or public institution, goes to work each day thinking they are delivering the best possible care and making the best possible decisions for the residents. However, we must be guided by the evidence and it shows that, for a particular group of care facilities, there is a consistent and persistent pattern of poorer outcomes in the context of emergency department transfers and hospitalizations. The most obvious reasons for this discrepancy have been adjusted for in our review; it is not about resident acuity, funded care hours or different licensing standards.

To get the much-needed answers, we must do additional research and analysis, and this requires more and better information than we currently have on staffing differences between the contracted care facilities and the public facilities.

Reducing hospitalizations for seniors is a goal that is gaining increasing attention and for good reason; it benefits both the senior and the taxpayer. The Ministry of Health must take a leadership role in directing the health authorities to work with their contracted care providers to collect the standardized data necessary to determine the root cause of this discrepancy which will then allow us to make the necessary changes.

APPENDIX A

About the data:

- Four fiscal years: from April 1, 2012 to March 31, 2016
- Resident characteristics, facility size, urban/rural status, facility admission and discharge dates, and the reason for discharge are from the Continuing Care Reporting System (CCRS). All care facilities in B.C. are required to submit information to CCRS.
- Funded direct care hours and ownership were compiled from data submitted to the Office of the Seniors Advocate by B.C.'s five health authorities.
- Emergency department visits: We looked at hospital admissions among all care facilities to the acute hospitals that report to the National Ambulatory Care Reporting System (NACRS). Since hospitals tend to admit from the their own emergency departments, this provided a way to select those care facilities (212) that transfer to NACRS hospitals only and are therefore properly represented in the emergency department data. NACRS is complete for all hospitals from April 1, 2014 to March 31, 2016 only, so the emergency department analysis is restricted to this time period of two fiscal years.
- Hospitalizations: All hospitals are required to submit to the Discharge Abstract Database (DAD).
- The Canadian Institute for Health Information (CIHI) administers the CCRS, NACRS, and DAD and provides B.C.'s data to the B.C. Ministry of Health, who in turn made the necessary data available. Personally identifying information, like date of birth and personal health number, was removed, and resident and facility identifiers were replaced with anonymized codes that supported linkage of records across datasets.

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Number: 1 Author: Jeff Subject: Sticky Note Date: 2018-07-31 6:50:28 PM
for hospitalization analysis and April 1, 2014 to March 31, 2016 for Emergency Department analysis.

Number: 2 Author: Jeff Subject: Inserted Text Date: 2018-07-31 6:49:29 PM
for

EMBARGOED

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BRITISH COLUMBIA

Cowan-Douglas, Rob J HLTH:EX

From: Cowan-Douglas, Rob J HLTH:EX
Sent: Wednesday, August 1, 2018 8:39 AM
To: 'Jeff Poss'
Subject: RE: FInal draft of Res Care to Hospital Transfer report
Attachments: ResidentialCaretoHospital-NR.pdf

Thanks. I've incorporated several of the suggestions. Isobel can speak to our decision around the ALC days calculation better than I can.

I've attached a final copy of our news release as an fyi!

Rob

From: Jeff Poss [mailto:jwposs@uwaterloo.ca]
Sent: Tuesday, July 31, 2018 7:02 PM
To: Cowan-Douglas, Rob J HLTH:EX
Cc: Mackenzie, Isobel HLTH:EX
Subject: RE: FInal draft of Res Care to Hospital Transfer report

Thanks Rob, I've read through the report, it reads very well. I've made some comments in the pdf, some are more substantive than others, you can decide if the improvement in precision is worth the trade-off in clarity.

The only big thing I spotted was in the financial analysis, for the ALC days, see my lengthy comment. It looks like you presume to save all the ALC days that are occurring. I assume the base hospital admission is taken care of in the section above, and focus only on the ALC portion at the end, I then apply 2 steps:

1) fewer ALC events with the HA rate of prevalence applied to the contracted admissions – this saves the entire ALC portion at the HA average ALC LOS
2) among those ALC events that will continue to occur at the HA prevalence rate, a shorter LOS saves some additional hospital days

(there may be other ways to tease this out)

If you want to discuss any of this, I am around this evening after 8:30 or so, we could chat then. Tomorrow I could be available between 7am and 8am.

From: Cowan-Douglas, Rob J HLTH:EX [mailto:Rob.CowanDouglas@gov.bc.ca]
Sent: July-31-18 5:04 PM
To: Jeff Poss
Cc: Mackenzie, Isobel HLTH:EX
Subject: FInal draft of Res Care to Hospital Transfer report

Hi Jeff,

We've arrived at a finalized version of the report. Could you please give it a once-over to ensure we're talking about the right numbers in the right way? We are set for a 9 am release tomorrow am.

Appreciated!

Rob

Rob Cowan-Douglas | Economist
Office: 250.952.3038 | Fax: 250.952.2970

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NEWS RELEASE

For Immediate Release
1 August 2018

Contracted Residential Care Facilities Responsible for Substantially More Hospital Visits and More than Double the Rate of Deaths in Hospital when Compared to Publically Operated Care Facilities

Victoria – B.C Seniors Advocate, Isobel Mackenzie, today released a report that compared hospitalization rates for residents of contracted long term care facilities (both not- for- profits and private companies) with residents from publically operated care facilities.

"After careful review of multi-year data, a consistent pattern emerges that shows a demonstrably greater use of the emergency department and hospital beds by residents from contracted long term care facilities versus residents from publically run facilities and a stunning 54% greater likelihood that you will die in the hospital if you live in a contracted care facility versus a publically operated facility," stated Mackenzie.

The report draws on data from Canadian Institute for Health Information's (CIHI) National Ambulatory Care Reporting System (NACRS) and the Discharge Abstract Database (DAD) from 24 hospitals in BC linked to 212 residential care facilities and their interRAI MDS 2.0 data. The data demonstrate that, compared to care homes operated directly by the health authority, residents who live in care home that is operated by a contracted provider are:

- **32% more likely** to be sent to the emergency department
- **34% more likely** to be hospitalized
- their length of stay in hospital is **32% longer**
- their chance of not returning to the care home converting to an alternative level of care (ALC) patient is **47% higher**
- **54% more likely** to die in the hospital

The Seniors Advocate advances the case that the numbers in the report require attention and raise a number of questions that need to be answered. "At every turn whether it is the decision to call the ambulance, the decision to admit the resident as in-patient, the decision on when or if to discharge the resident back to the care facility we see the contracted care facilities persistently failing relative to the health authority operated facilities," continued Mackenzie.

The report highlights a financial impact of $16 million saved annually, if contracted facilities were able to match the performance of the public facilities and it would also create an additional 15,481 bed days for an already congested system. However, perhaps most importantly to the Seniors Advocate it would reduce the risk of hospital acquired infections or delirium, which combine to affect an estimated 50% of frail elderly patients. "Hospitals are not the best place for the frail elderly. Issues related to deconditioning and the anxiety of unfamiliar places and interrupted routines can have a significant impact on the health and well- being of the frail elderly population. We also know that most people want to die at home and for many of our frail and elderly seniors, "home" is the residential care facility. With a rate more than double the public facilities we really need to ask why contracted care facilities are seeing their residents die in the hospital," said Mackenzie, who commenced the study in response to findings from working shifts in six hospitals throughout B.C.

The report highlights that contracted facilities care for less frail and complex residents than public facilities yet they send more residents to the hospital. The report adjusted for resident complexity as well as funded hours of care and the same pattern held, higher hospitalization for residents of private care homes and much higher rates of death in the hospital.

"We looked at the obvious reasons you might see this pattern, such as the residents are sicker or there is less funded care staff, however neither of those variables explained the results. This means we need to look at others issues related to the experience and continuity of the staff and the financial incentives for contracted care home operators," stated Mackenzie

Private care facilities, on average pay lower wages than public facilities. Only 54 out of 184 private care facilities pay the top wages and benefits of the master collective agreement. The report highlights that lower wages could result in less experienced staff and/or more staff turnover as care aides will leave for a position in a facility paying higher wages. These factors could contribute to staff who are less confident in their practice and more likely to send a resident to the hospital. Constantly changing staff could also be problematic as continuity of care in nursing homes is proven to link with better health outcomes including lower rates of hospitalization.

The report poses a number of questions related to the lack of consistent data and information from private care facilities related to staffing. "We currently have no provincial data on staff turnover in contracted facilities. In public facilities where the wages and benefits are both consistent and better there is a low staff turnover as supported by data from the Health Employers of BC, we cannot currently compare this with private facilities.

"We do not know the level of clinical support offered to care staff in private facilities, the mix of RN and LPN, the use of Allied Health professionals, the practice for sick and vacation relief, the use of casual versus regular staff, the age and experience of the care staff are all variables that may be affecting the performance of the private residential care facilities and despite the fact they are funded by the Health Authorities, we are not consistently and systematically collected this information," continued Mackenzie.

The report also questions whether the contractual nature of the relationship between health authorities and the care home are appropriate. The report highlights that most contracted operators receive the same amount of money whether the resident is in the facility or the hospital and that facilities are funded to pay higher wages then they are actually paying.

The report calls upon the Ministry of Health to work with the Health Authorities to get more information and data to answer the many questions raised in the report.

-30-

For More Information Contact: Linda Carey 778-698-8143

Cowan-Douglas, Rob J HLTH:EX

From: Cowan-Douglas, Rob J HLTH:EX
Sent: Thursday, August 30, 2018 9:59 AM
To: Jeff Poss; kim.mcgrail@ubc.ca
Subject: Slides
Attachments: 08-30 - From Residential Care to Hospital.pdf

Office of the Seniors Advocate

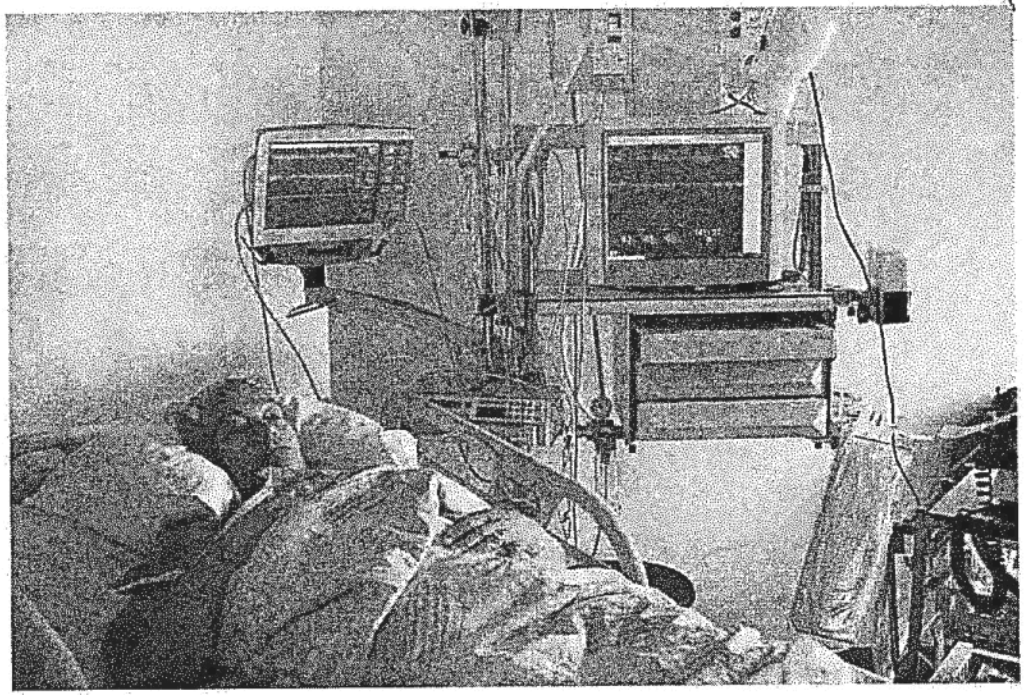
From Residential Care to Hospital: Discussion

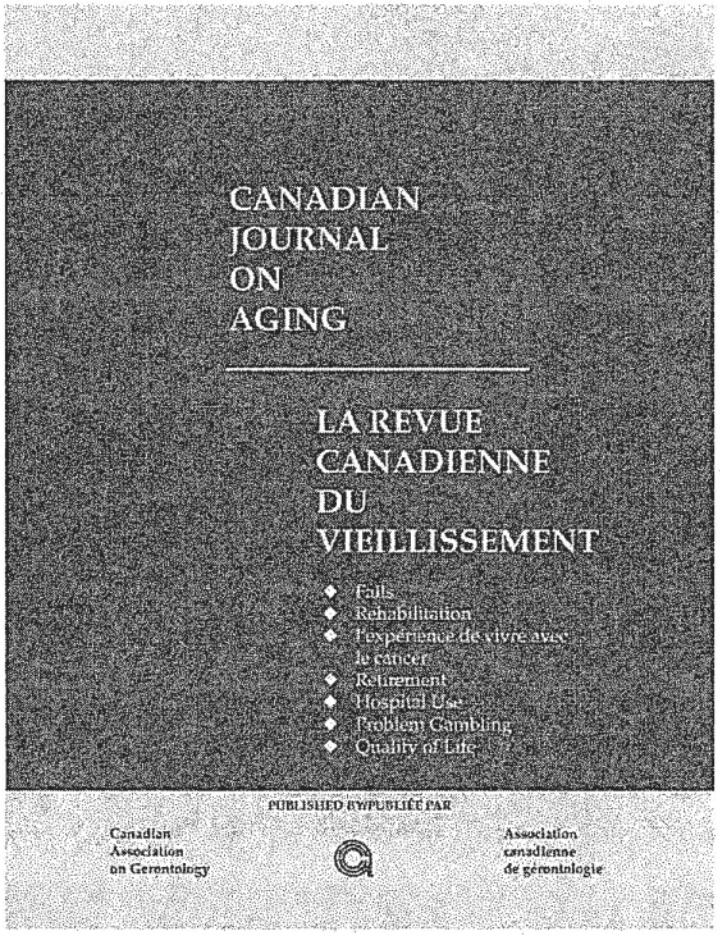
August 30, 2018

OFFICE OF THE
SENIORS ADVOCATE

Hospitalization of frail seniors

- Increased risk of:
  - Delirium
  - Pressure ulcers
  - Infection
  - Falls
  - Anxiety
  - Deconditioning
  - Death





Can J Aging. 2014 Mar;33(1):38-48. doi: 10.1017/S0714980813000615. Epub 2014 Jan 3.

Nursing home characteristics associated with resident transfers to emergency departments.

McGregor MJ[1], Abu-Laban RB[2], Ronald LA[1], McGrail KM[3], Andrusiek D[4], Baumbusch J[5], Cox MB[2], Salomons K[2], Schulzer M[6], Kuramoto L[2].

OFFICE OF THE
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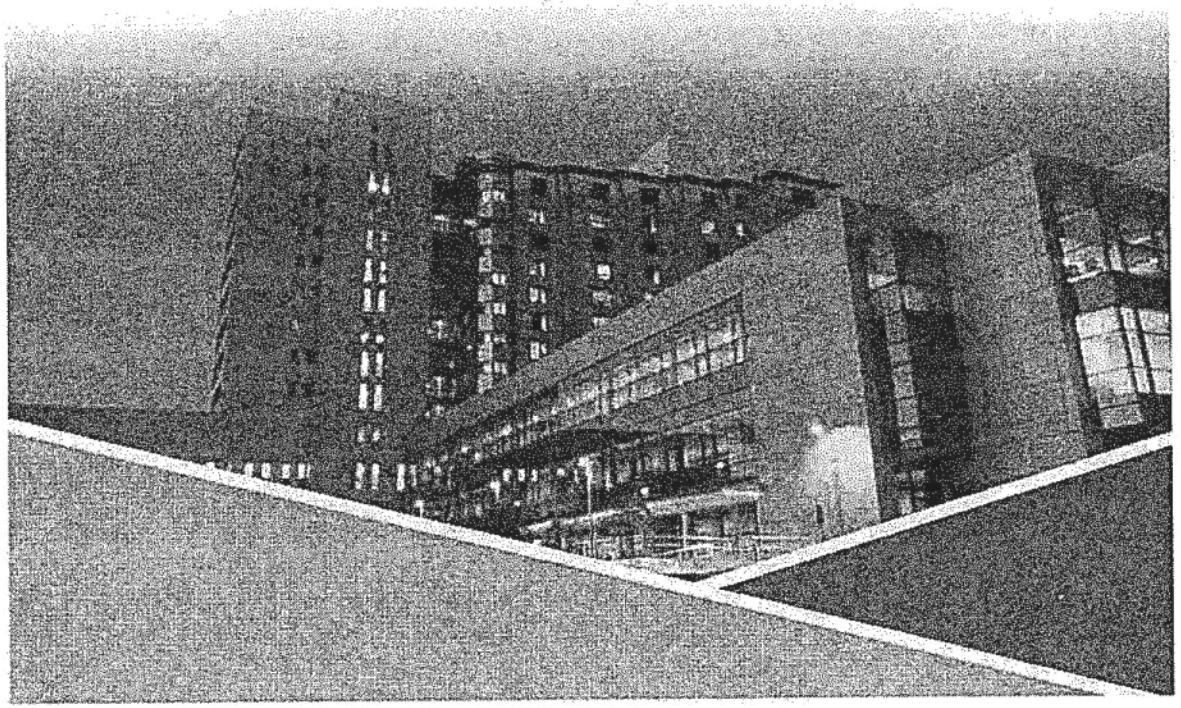
BRITISH COLUMBIA

From Residential Care to Hospital:

An Emerging Pattern



Review

- Ministry of Health
  - Privacy Impact Assessment
    - Legislative authority to collect and use data
- University of British Columbia ethics review
  - Serves valid public interest
  - Minimal risk to people represented in the data sets

Data sources

- Quick Facts Directory (QFD)
  - Facility ownership
  - Funded care hours
- Continuing Care Reporting System (CCRS)
  - Resident characteristics (MDS 2.0)
  - Facility size
  - Urban/rural status
  - Facility admission and discharge dates
  - Reason for discharge
  - 55,130 episodes of care (24,000 deaths)
  - 358,470 MDS assessment records
  - All 293 facilities
  - April 1, 2012 to March 31, 2016

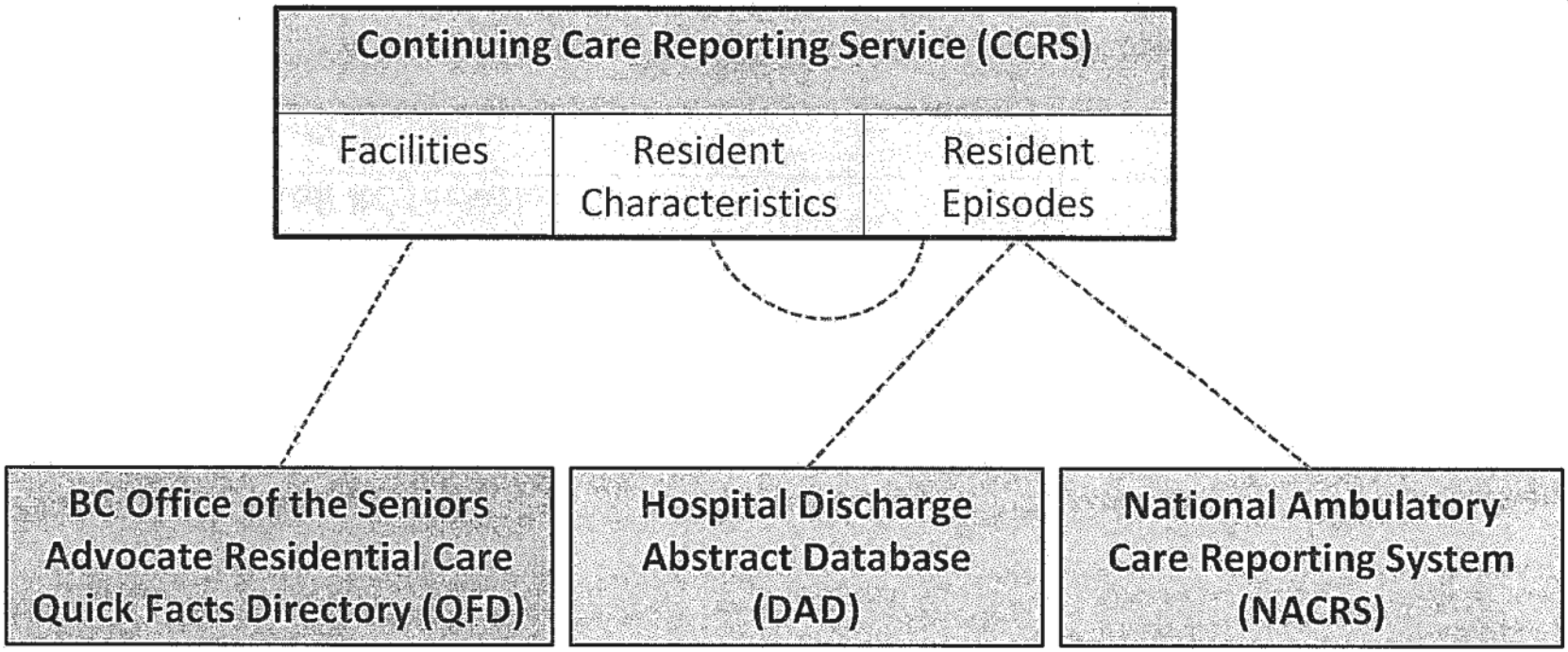
Data sources

- National Ambulatory Care Reporting System (NACRS)
  - Information for 212 facilities (82% of residents)
  - Triage and acuity scale
  - Dates of admission and discharge
  - Discharge disposition, presenting condition(s), standardized diagnostic codes
  - 22,062 records from April 1 2014 to March 31, 2016
- Discharge Abstract Database (DAD)
  - Information for all facilities
  - Diagnosis, admission and discharge dates, discharge disposition
  - ALC status
  - Length of stay

Three models

1) Emergency department transfer
   - NACRS, CCRS
   - 212 facilities
   - April 1, 2014 to March 31, 2016
2) Hospitalizations
   - DAD, CCRS
   - All facilities
   - April 1, 2012 to March 31, 2016
3) Death in hospital
   - DAD, CCRS
   - All facilities
   - April 1, 2012 to March 31, 2016

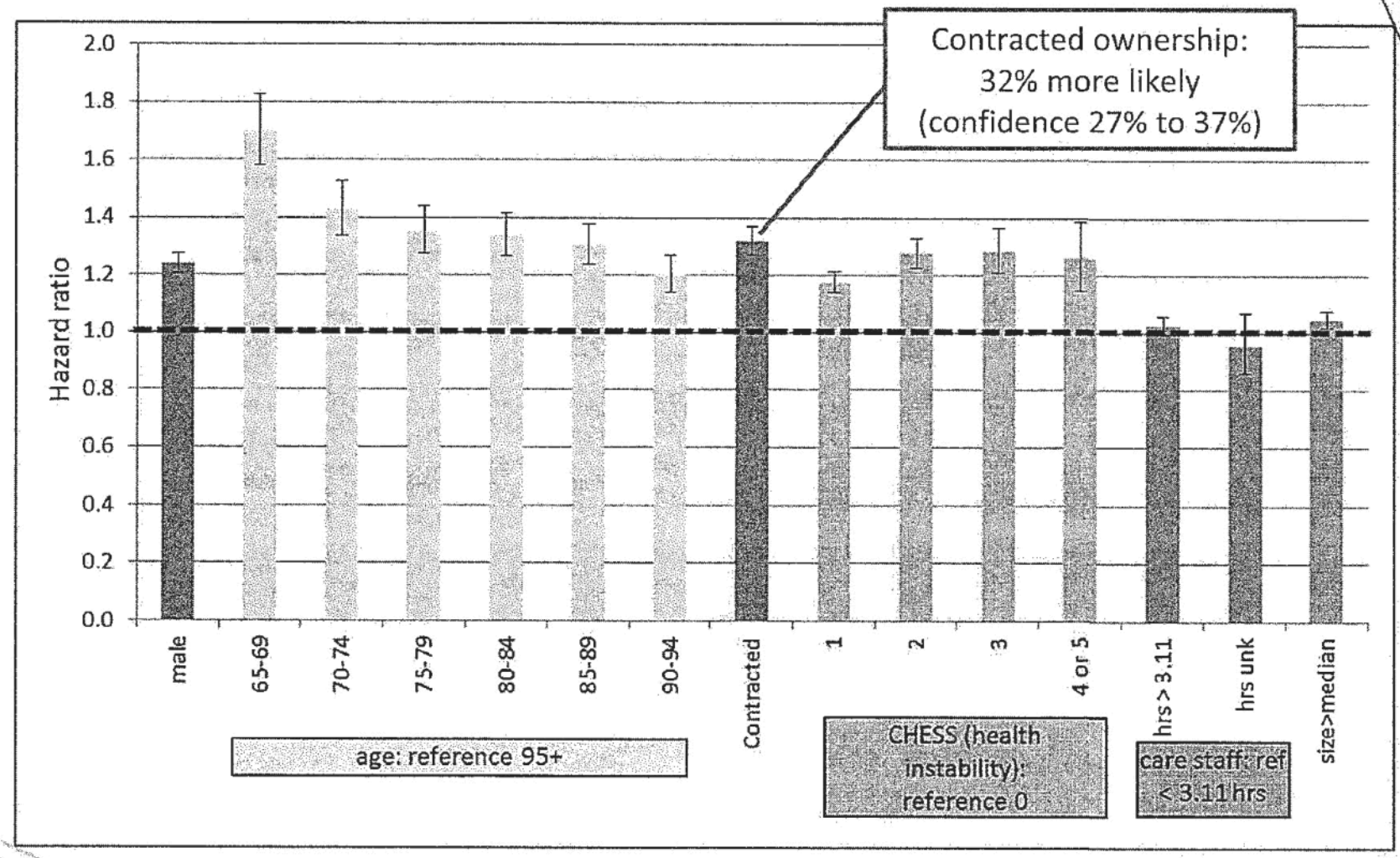
Sources of data used



NACRS data

	HA	All contracted	All
Number of NACRS ED visits	4,827	17,235	22,062
Number of RC facilities	52	160	212
Total RC beds	6,167	15,833	22,000
Reference: all RC facilities	*116*	*188*	*304*
Reference: all RC beds	*9,328*	*17,659*	*26,987*
% of beds represented by 212 facilities:	*66%*	*90%*	*82%*
NACRS ED visits per 100 thousand resident days	131.4	169.4	159.3
Death after arrival	0.6%	0.5%	0.5%
Admitted to the hospital of this ED	44.7%	46.1%	45.8%

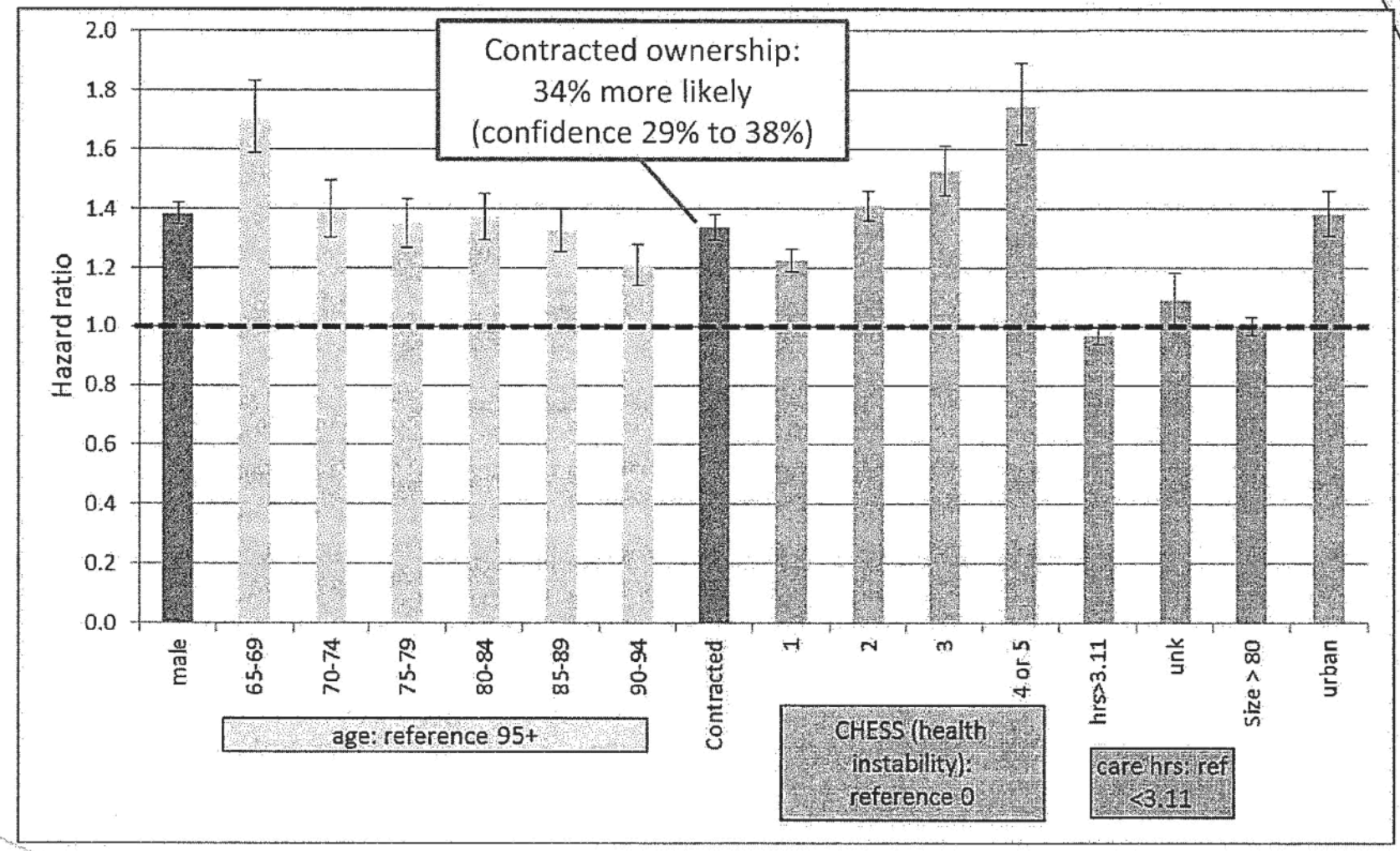
Model 1: ED visits



DAD data

	HA	All Contracted	All
Number of hospitalizations	*9,017*	*22,710*	*31,727*
Admitted from ED	65%	76%	73%
Direct admission	34%	24%	27%
proportion of direct admits are elective	84%	89%	88%
Urgent/emergent admission	71%	79%	76%
mean total LOS all admissions	5.7	7.6	7.0
mean acute LOS urgent/emergent only	6.7	8.3	7.9
Proportion with any ALC, urgent/emergent	2.1%	2.9%	2.7%
Total ALC days	2,709	*10,921*	*13,630*
ALC days per 100 thousand resident-days	25.0	48.7	41.0
Mean ALC LOS	17.9	19.5	19.2
Hosp'ns/100 thousand resident-days urgent/emergent only	59.0	79.6	72.9
Acute hosp days/100 thousand resident-days urgent/emergent only	395.5	663.0	575.8
Total hosp days/100 thousand resident-days urgent/emergent only	418.0	713.1	614.1
Deceased among urgent/emergent admissions	11.0%	13.2%	12.7%

Model 2: Hospital admission



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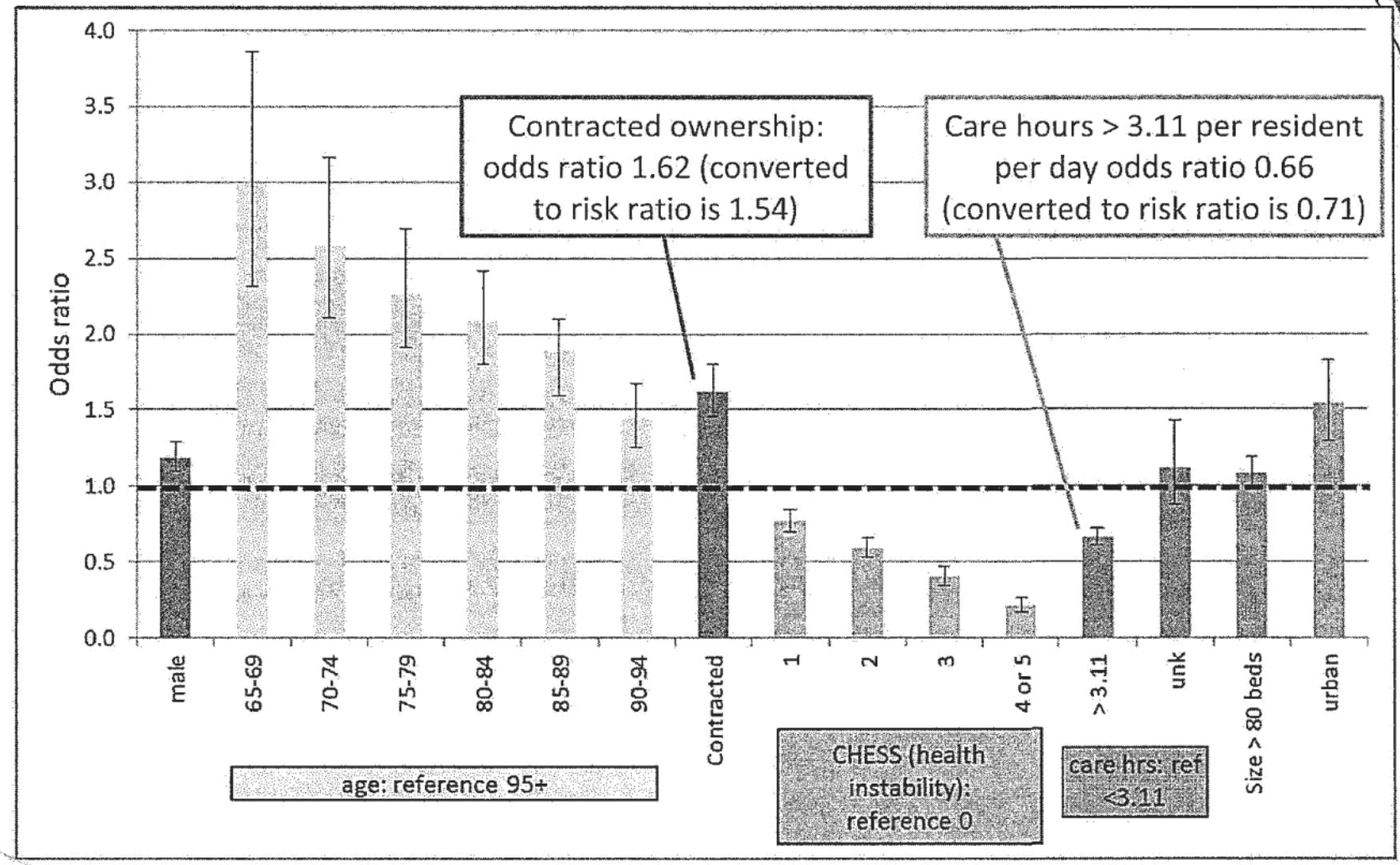
Model 3: Death in hospital



Unadjusted findings

	Residents of facilities in:		Contracted is x% higher
	HA facilities	Contracted facilities	
Model 1: ED visits per 100,000 resident days of stay	131.4	169.4	29% (adjusted is 32%)
Model 2: Hospital admissions per 100,000 resident days of stay	59.0	79.6	35% (adjusted is 34%)
Model 3: Proportion of deaths in hospital	8.2%	14.8%	80% (adjusted is 54%)
Average length of stay, all admissions	5.7 days	7.6 days	32%
Hospitalization resulting in Alternate Length of Stay (ALC)	2.1%	2.9%	36%
ALC days per 100,000 resident days of stay	25.0	48.7	95%
Total hospital days per 100,000 resident days of stay	418	713	71%

Compelling evidence

- Integrity of data
- Sound methodology
- Size of data set
- Consistent pattern
- Consistent with other studies

Why?

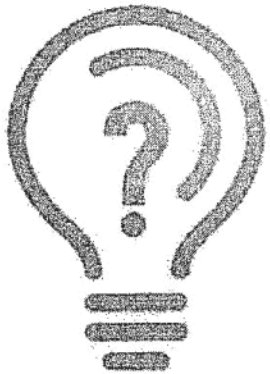
- Not the obvious
  - Staffing level
  - Acuity
- Other influences
  - Staffing complement/mix, experience and continuity
  - Additional training and/or access to CNS
  - Funding incentives
  - MOST (do not treat, do not hospitalize)

Next steps

- Gather more data
- Staffing mix from health authority and contracted facilities
- Do not hospitalize and do not treat orders
- Staff turnover from contracted
- Staff wages from contracted
- Examine incentive models in other jurisdictions
- Share data and findings with other jurisdictions; replicate in other jurisdictions

Goal

- Best of care possible for seniors living in long term care
  - Decrease unnecessary hospitalizations
  - Supporting seniors to remain in their homes



Q & A Session

OFFICE OF THE
SENIORS ADVOCATE

Ronayne, Bruce HLTH:EX

From: Cowan-Douglas, Rob J HLTH:EX
Sent: Wednesday, August 1, 2018 8:38 AM
To: 'McGrail, Kimberlyn'
Cc: Mackenzie, Isobel HLTH:EX
Subject: RE: please send Kim latest versions
Attachments: ResidentialCaretoHospital-NR.pdf; SA-ResidentialCareTransfers-v8.pdf

Hi Kim,

Please find attached the final report and the final news release.

Regards,

Rob

From: Mackenzie, Isobel HLTH:EX
Sent: Wednesday, August 1, 2018 8:33 AM
To: 'McGrail, Kimberlyn'
Cc: Cowan-Douglas, Rob J HLTH:EX
Subject: please send Kim latest versions

Rob- can you please send Kim the final version of both the report and the news release and can you see that Jeff gets a copy of the news release.

IM

OFFICE OF THE
SENIORS ADVOCATE

NEWS RELEASE

For Immediate Release
1 August 2018

Contracted Residential Care Facilities Responsible for Substantially More Hospital Visits and More than Double the Rate of Deaths in Hospital when Compared to Publically Operated Care Facilities

Victoria – B.C Seniors Advocate, Isobel Mackenzie, today released a report that compared hospitalization rates for residents of contracted long term care facilities (both not- for- profits and private companies) with residents from publically operated care facilities.

"After careful review of multi-year data, a consistent pattern emerges that shows a demonstrably greater use of the emergency department and hospital beds by residents from contracted long term care facilities versus residents from publically run facilities and a stunning 54% greater likelihood that you will die in the hospital if you live in a contracted care facility versus a publically operated facility," stated Mackenzie.

The report draws on data from Canadian Institute for Health Information's (CIHI) National Ambulatory Care Reporting System (NACRS) and the Discharge Abstract Database (DAD) from 24 hospitals in BC linked to 212 residential care facilities and their interRAI MDS 2.0 data. The data demonstrate that, compared to care homes operated directly by the health authority, residents who live in care home that is operated by a contracted provider are:

- **32% more likely** to be sent to the emergency department
- **34% more likely** to be hospitalized
- their length of stay in hospital is **32% longer**
- their chance of not returning to the care home converting to an alternative level of care (ALC) patient is **47% higher**
- **54% more likely** to die in the hospital

The Seniors Advocate advances the case that the numbers in the report require attention and raise a number of questions that need to be answered. "At every turn whether it is the decision to call the ambulance, the decision to admit the resident as in-patient, the decision on when or if to discharge the resident back to the care facility we see the contracted care facilities persistently failing relative to the health authority operated facilities," continued Mackenzie.

The report highlights a financial impact of $16 million saved annually, if contracted facilities were able to match the performance of the public facilities and it would also create an additional 15,481 bed days for an already congested system. However, perhaps most importantly to the Seniors Advocate it would reduce the risk of hospital acquired infections or delirium, which combine to affect an estimated 50% of frail elderly patients. "Hospitals are not the best place for the frail elderly. Issues related to deconditioning and the anxiety of unfamiliar places and interrupted routines can have a significant impact on the health and well- being of the frail elderly population. We also know that most people want to die at home and for many of our frail and elderly seniors, "home" is the residential care facility. With a rate more than double the public facilities we really need to ask why contracted care facilities are seeing their residents die in the hospital," said Mackenzie, who commenced the study in response to findings from working shifts in six hospitals throughout B.C.

The report highlights that contracted facilities care for less frail and complex residents than public facilities yet they send more residents to the hospital. The report adjusted for resident complexity as well as funded hours of care and the same pattern held, higher hospitalization for residents of private care homes and much higher rates of death in the hospital.

"We looked at the obvious reasons you might see this pattern, such as the residents are sicker or there is less funded care staff, however neither of those variables explained the results. This means we need to look at others issues related to the experience and continuity of the staff and the financial incentives for contracted care home operators," stated Mackenzie

Private care facilities, on average pay lower wages than public facilities. Only 54 out of 184 private care facilities pay the top wages and benefits of the master collective agreement. The report highlights that lower wages could result in less experienced staff and/or more staff turnover as care aides will leave for a position in a facility paying higher wages. These factors could contribute to staff who are less confident in their practice and more likely to send a resident to the hospital. Constantly changing staff could also be problematic as continuity of care in nursing homes is proven to link with better health outcomes including lower rates of hospitalization.

The report poses a number of questions related to the lack of consistent data and information from private care facilities related to staffing. "We currently have no provincial data on staff turnover in contracted facilities. In public facilities where the wages and benefits are both consistent and better there is a low staff turnover as supported by data from the Health Employers of BC, we cannot currently compare this with private facilities.

"We do not know the level of clinical support offered to care staff in private facilities, the mix of RN and LPN, the use of Allied Health professionals, the practice for sick and vacation relief, the use of casual versus regular staff, the age and experience of the care staff are all variables that may be affecting the performance of the private residential care facilities and despite the fact they are funded by the Health Authorities, we are not consistently and systematically collected this information," continued Mackenzie.

The report also questions whether the contractual nature of the relationship between health authorities and the care home are appropriate. The report highlights that most contracted operators receive the same amount of money whether the resident is in the facility or the hospital and that facilities are funded to pay higher wages then they are actually paying.

The report calls upon the Ministry of Health to work with the Health Authorities to get more information and data to answer the many questions raised in the report.

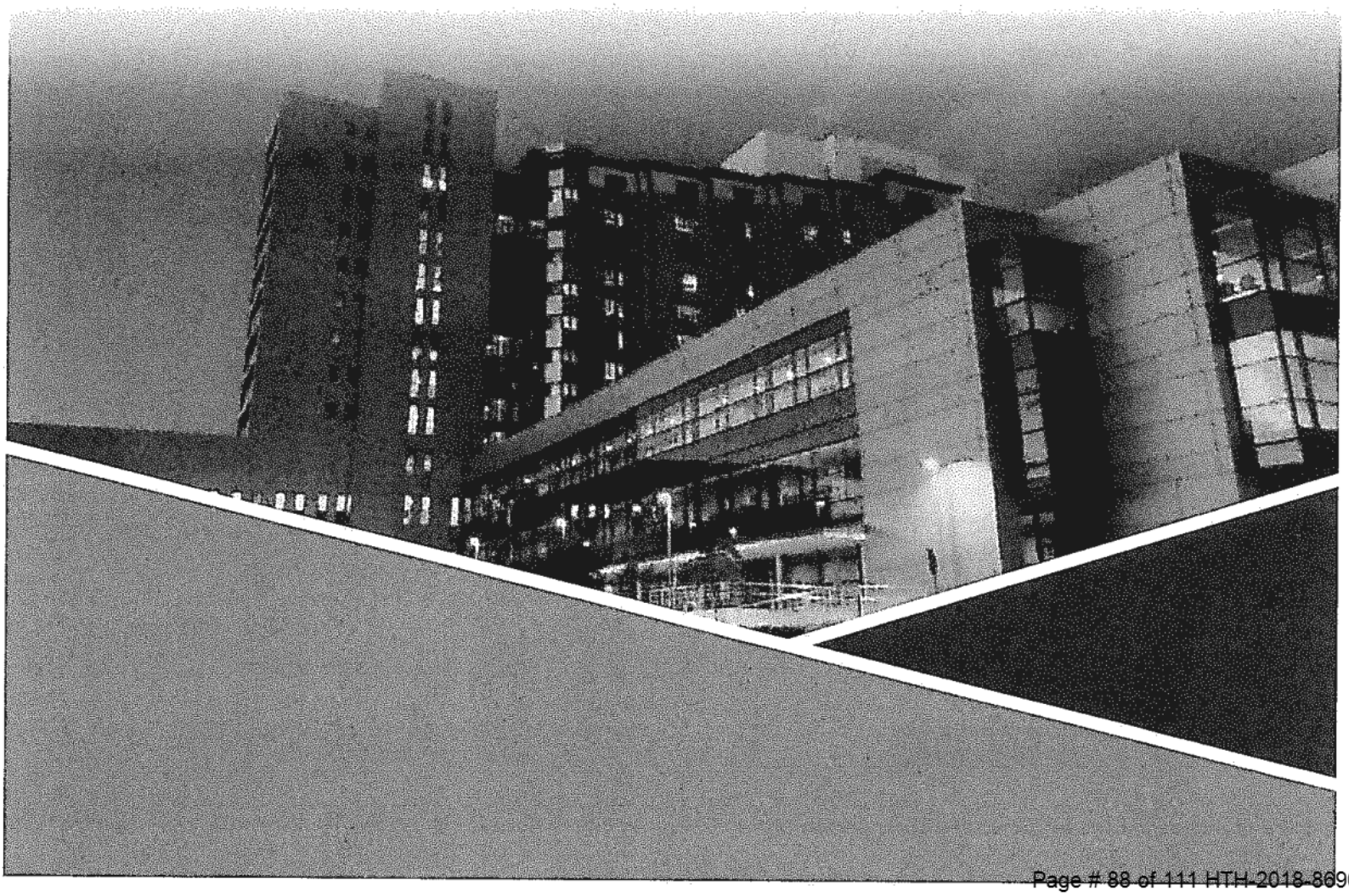
-30-

For More Information Contact: Linda Carey 778-698-8143

OFFICE OF THE
SENIORS ADVOCATE
BRITISH COLUMBIA

From Residential Care to Hospital:

An Emerging Pattern



OFFICE OF THE
SENIORS ADVOCATE
BRITISH COLUMBIA

July 31, 2018

This report resulted from the feedback I received from emergency room clinicians. Working alongside front line staff in six different hospitals throughout the province, I heard a common complaint. Many felt that some care homes in their area were sending residents to the emergency department unnecessarily. This sparked the question *"what do the data tell us about who is going to the emergency department and is there a pattern that predicts a particular care home is more likely to call the ambulance?"*

In looking for an answer to the question, we found a rich repository of data and information that demonstrate a strong pattern of emergency department visits, hospitalization rates and death in hospital for a particular group of care homes based on the type of operator. If you are a resident living in a licensed care facility operated by a *contracted* provider versus one operated by a health authority, you are:

- **32% more likely** to be sent to the emergency department
- **34% more likely** to be hospitalized
- Your length of stay in hospital will be **32% longer**
- There is a **47% greater likelihood** that you will not return to the facility you came from and you will become an alternative level of care (ALC) patient
- **54% more likely** to die in the hospital

If contracted care facilities performed as well as health authority operated facilities, the health care system would:

- Save $16 million annually
- Increase capacity by freeing up 15,481 hospital beds each year
- Improve health outcomes for frail seniors via decreases in adverse events and hospital deaths

This is an important issue. Hospital congestion and costs are increasing and improving the care and quality of life for seniors in residential care is a goal we all want to achieve. Looking at the evidence to guide our efforts and focus our priorities will be the best path forward to needed systemic change.

I want to thank the many nurses and physicians in emergency rooms across the province who took the time to share their thoughts and observations with me, and I want to thank the OSA research team including Dr. Jeff Poss from the University of Waterloo and Dr. Kim McGrail from the University of British Columbia, the B.C. Ministry of Health and the Canadian Institute of Health Information for your data and analysis. I continue to be inspired by the many people who want to improve the lives of B.C. seniors.

Sincerely,

Isobel Mackenzie
Seniors Advocate
Province of British Columbia

From Residential Care to the Hospital: A Pattern Emerges

Introduction

Since its inception, the Office of the Seniors Advocate (OSA) has conducted research on various aspects of the residential care sector. In British Columbia, almost 28,000 seniors live in one of 293 publicly subsidized residential care facilities, sometimes referred to as nursing homes. Residents of these facilities are generally the most frail and vulnerable members of the senior population.

All British Columbians are entitled to access a subsidized residential care bed. You are assessed for eligibility based on a functional assessment, while a financial assessment determines how much you will pay. The real cost of subsidized residential care ranges from $6,000-$7,500 per month. Residents, however, pay only 80% of their after tax income, up to a maximum capped rate of $3,278 per month. Currently, the average fee charged to residents is $1,685 per month; 30% of residents pay the minimum of $1,130 per month and only 7% pay the maximum capped rate of $3,278.

Currently in B.C., about 90% of all long term care beds are subsidized. Private-pay beds can be co-located in a facility that also has subsidized beds (approximately 100 contracted facilities have a combination of private-pay and subsidized beds) or the facility can be entirely devoted to private-pay residents. This report excludes those facilities with no subsidized beds.

Of the 293 publicly subsidized care facilities in British Columbia, 32% of beds are in facilities operated directly by the health authority, while the majority (68%) of beds are in facilities operated by contracted care providers under a contractual arrangement with the health authority. The contracted care providers are an equal mix of not-for-profit organizations and private companies.

There is often debate about the quality of care and cost differences between a publicly operated facility and a contracted facility. The Office of the Seniors Advocate collects large amounts of data and information on both public and contracted care homes in the province. For most quality indicators, there is no statistically significant difference between contracted long term care facilities and those operated by a health authority. On average, contracted facilities do provide less physiotherapy, occupational therapy and recreation therapy than public facilities; however, they are funded on average for fewer hours of direct care and an accurate comparison of these therapy services cannot be made until the funding is standardized. We know that contracted facilities have more substantiated complaints and reportable incidents than public facilities, but in the recent province-wide satisfaction survey of all subsidized contracted and public care facilities in the province, there was no overall difference in the level of satisfaction and quality of life indicators between those facilities operated by a health authority (public) and those facilities operated by the contractors.

There is one area, however, with a statistically significant difference between facilities that are publicly operated and those that are operated by the contracted providers—emergency department use and hospitalization rates.

The OSA examined multi-year data for all subsidized care facilities in B.C. Of the 293 subsidized residential care facilities in B.C. at the time of the review, 212 facilities were included in the study. These facilities represent 82% of all residential care beds in the province. The decision to include most, but not all residential care facilities was based on accessing the best available data for hospitals and emergency rooms – the Canadian Institute for Health Information's (CIHI) National Ambulatory Care Reporting System (NACRS) and the Discharge Abstract Database (DAD). As not all hospitals in B.C. are reporting information to the NACRS database, we chose to focus on those geographic areas with hospitals reporting NACRS data. Those hospitals that were excluded were generally smaller hospitals in more remote parts of the province. Additionally, we reviewed interRAI MDS 2.0 datasets for those residents who experienced a transfer to the emergency department. The interRAI MDS 2.0 assessment is the functional assessment given to all residents on a quarterly and annual basis (as well as upon admission), and is used in all of B.C.'s subsidized residential care facilities. This information, taken together, provides an interesting picture of the care facility transfer to emergency department patterns in B.C., including information about the reason for transfers, transfers that result in admissions to acute care, and average lengths of stay in acute care if admitted from a care facility.

The 24 acute hospitals with NACRS data are urban hospitals and, as a result, the outcome of our analysis may not be applicable to rural areas. We reviewed data for resident transfers from the 212 care facilities whose pattern of transfers were to the 24 NACRS sites. Of the 212 care facilities included in the study, 25% (52 facilities) are health authority operated and 75% (160 facilities) are contracted facilities operating subsidized beds under contract with a health authority. We explored all available emergency department data and inpatient data for acute, unplanned hospitalizations (excluding admissions for elective and otherwise planned procedures). Additionally, we reviewed the primary admitting diagnosis assigned in hospital to understand whether some reasons for transfer and admission were more common than others. In each of these data reviews we focused on the care facility population aged 65 or older because older persons make up most (about 94%) of the people living in care facilities. The remaining 6% are under age 65 and were excluded from our analysis.

The results of this research indicates that, all things being equal, if you live in a **contracted** facility, you are:

- **32% more likely** to be sent to the emergency department.
- **34% more likely** to be hospitalized.
- Once admitted, your length of stay is **32% longer.**
- Your chance of not returning to your nursing home but instead reverting to an alternative level of care (ALC) patient is **47% higher** and your average length of stay as ALC is **9% longer** .
- The likelihood of dying in the hospital is **54% higher** if you live in a contracted care facility versus a public care facility.

While contracted care facilities, on average, care for less complex residents than public facilities and they have fewer funded hours of care, the results reported in this paper have corrected for these variations in funded levels of care and resident complexity (acuity).

The data show a consistent pattern of underperformance across standard measures of hospital utilization for residents by contracted residential care facilities.

The importance of this pattern is twofold. From the perspective of the public, there is a need to reduce pressure on the hospital system given its high cost and congestion. From the perspective of the senior living in a residential care facility, any trip to the hospital presents a risk and should only be undertaken when necessary.

Background

To gain a greater understanding of the emergency department experience for seniors, the Seniors Advocate worked shifts alongside front line clinicians in a number of emergency departments across the province.

While working shifts in six different emergency departments throughout B.C., the Seniors Advocate heard a similar theme from front line clinicians. Many nurses and some physicians commented on the predictability of an emergency department transfer resulting in an admission to hospital based on the residential care facility in which the senior resided, rather than on the acuity of their condition. This led the OSA to examine whether, in fact, there was a pattern among facilities that could predict a greater likelihood of transfer to the emergency department or admission to hospital. The answer is "yes," there is a predictable pattern, with a resident living in a contracted facility having a significantly greater likelihood, compared to that same resident residing in a publicly operated facility, of: being sent to the emergency department; being admitted to hospital; staying longer in hospital; and dying in hospital.

Why does it matter how often a senior living in a long term care facility goes to the emergency department?

People who live in British Columbia's residential care facilities require care for a number of long-term chronic health conditions, including diabetes, chronic obstructive pulmonary disease (COPD), high blood pressure, heart disease (including heart failure), and a variety of neurological and other illnesses. Given the complexity of many residents' care needs, it is reasonable to assume that a trip to the emergency department or a stay in hospital is to be expected. Indeed, we want to ensure that, if required and if it is a resident's wish, they are transferred to the emergency department. However, it is important to understand that a potentially avoidable trip to hospital for a frail senior carries a risk often equal to the risk of not going to the hospital when necessary.

Any transfer to an emergency department or stay in hospital is likely to be stressful, most particularly for those with dementia, hearing or visual challenges, and those who may not understand why they are being transferred. The stresses are many, including transport in an ambulance, potentially long waits in an emergency department in order to see a physician, in-hospital transfers to diagnostic areas and more waiting to learn the plan of care, including if a decision is made for admission to hospital. Even when a decision is made to admit to hospital, the waiting continues, including long waits on stretchers in hallways with unfamiliar noises, unfamiliar people and staff rushing by. This can be frightening for almost anyone and even more so for frail and vulnerable seniors.

Hospitals are not designed to meet the needs of frail elderly people. With the loss of familiar routines, increased confusion and loss of movement and mobility related to extended periods of time in bed, frail seniors recover more slowly from illness and are more susceptible to the unintended effects of hospitalization (skin breakdown, delirium and hospital-acquired infections).

We know that up to 50% of frail seniors will experience a hospital acquired delirium or infection. This makes it all the more important to ensure that we are not unnecessarily transferring frail seniors from their care facility to the hospital and that, if the trip to the emergency department is necessary, the senior returns to the familiar surroundings of their home in the care facility as soon as possible.

This isn't to suggest that care facility residents should never be sent to the emergency department or admitted to hospital. Sometimes, urgent health issues arise that cannot be managed within the residential setting, necessitating a transfer to an emergency department and an admission to acute care. However, the data provide evidence of a systemic pattern that demonstrates one group of care facilities—those operated under contract—are sending more residents to the hospital than those facilities operated by the public sector, even after adjusting for staffing levels and resident acuity.

A Trip to the Emergency Department

There are several reasons a resident may be transferred to the emergency department. Transfers may be for diagnostic services (lab and x-ray), for assessment by a physician for potentially treatable conditions (fracture, infection, stroke or heart attack), or for symptom management at end of life. The reasons for transfer range from less complex situations that may have potential to be more effectively managed within a care facility, to those requiring services and equipment only available in a hospital.

Across the Province:

- Seniors in care homes go to the emergency department about 13,500 times per year. On average, 40% of seniors will go to the emergency department during their first year in the care home; 24% will have only one trip while 16% will go twice or more during their first year in the nursing home.
- 46% of residents who got to the emergency department are assessed as appropriate to admit as an in-patient.
- Funded direct care hours—either above or below the median of 3.11 direct care hours—did not impact the rate of transfer to the emergency department, regardless of facility ownership.
- Residents with certain diagnoses are much more likely to be admitted to hospital after arriving at the emergency department. The most likely to be admitted diagnoses are: sepsis (95% admitted), hip fracture (94%), pneumonia (84%) and heart failure (80%). These four diagnoses alone make up 30% of all hospital admissions that come through the emergency department and are likely to be triaged as moderately urgent or higher.
- Nearly half (43%) of all care facility transfers are related to infections (22%) and injuries (21%), with most injuries consistent with a fall. Common infections include pneumonia and urinary tract infections, as well as sepsis. Injuries related to falls are most frequently femur/hip fractures and injuries to the head (ranging from lacerations to more significant head injury).

Transfer to Emergency: Contracted versus Public:

Contracted facilities have a 32% higher rate of transfer of residents to the emergency department than public, health authority operated facilities.

On the basis of a review of transfer to emergency department data alone, it's difficult to explain why contracted facilities have a significantly higher rate of transfer to the emergency department overall. A review of interRAI MDS 2.0 assessment data suggests resident acuity does not appear to explain the difference in transfer rates between public versus contracted facilities in B.C. In fact, contracted facilities have, on average, residents with less complexity and frailty than public facilities. The health authority operated sites have an 11% higher prevalence of residents with congestive heart failure (CHF) and a 7% higher prevalence of residents with a diagnosis of COPD than do contracted facilities—two of the most frequent reasons that residents are admitted to the emergency department.

The obvious reasons why contracted facilities might send more residents to the emergency department—such as, residents are more sick, there is less funded care, different licensing and regulatory standards—do not apply. This leaves a number of possible factors, such as staff skill mix. We do know that the actual number of funded care hours does not impact the pattern of transfer to the emergency department, but what we do not know with any certainty is the skill mix within those funded care hours. The relative use of RNs, LPNs and care aides, the wage rates paid, the practices around providing relief and backfill for vacation and sick leave, and the use of sub-contracted care staff all may play a role and warrant further study. So, too, must we look at annual staff training and the overall clinical leadership and expert clinical supports provided in contracted versus public facilities.

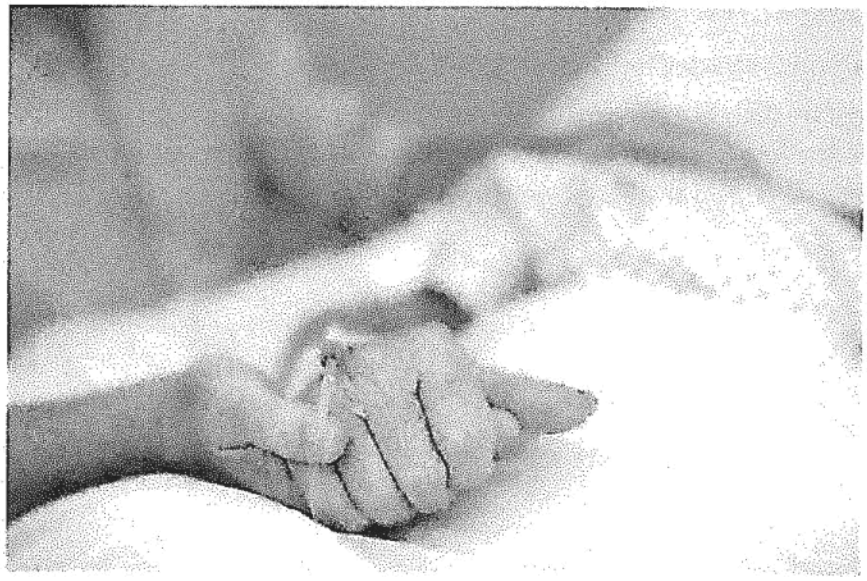
Whatever the underlying cause, the result is that, all things being equal, some residents who live in a contracted facility and would have had their symptoms addressed by the care staff in a public facility are instead sent to the emergency department.

Decision to Admit as In-patient

Once a senior arrives at the emergency department, a decision is made whether or not to treat the senior for the presenting symptom(s) and send them back to the care facility or to admit them to hospital as an in-patient. The reasons a resident may be admitted to acute care are wide ranging; however, we know from our review of the emergency department transfer data that four primary conditions drive admission to hospital: infections (including sepsis), fractures, and chronic disease management (e.g., CHF, COPD). More importantly, research indicates that seniors in hospital are at risk of unintended consequences such as skin breakdown, loss of mobility and strength, increased confusion and delirium. Every hospital admission and every day in hospital increases the risk of unintended consequences for the frail elderly.

Hospital Admissions: The Provincial Perspective

- Seniors in care facilities are hospitalized around 8,000 times per year, or approximately 22 admissions per day across the province.
  - About 1 in 8 residents admitted to hospital from the emergency department dies in hospital.
  - 75% of care facility residents admitted to hospital are first seen in the emergency department, while 25% are not seen in the emergency department but admitted directly to a hospital bed. Most of these direct admissions (almost 90%) are "elective" (planned) and are for scheduled procedures or other medical treatments or tests requiring hospital admission. These elective admissions were excluded from our analysis.
  - The most common reasons for a care facility resident to be admitted to hospital include pneumonia (13%), fracture of femur/hip (11%), urinary system disorders including urinary tract infections (UTIs) (8%), and lung conditions including COPD (5%).
  - The most common diagnoses for those care facility residents who die in hospital are pneumonitis and pneumonia (together 1 in 5 deaths), sepsis, CHF, COPD, and hip fractures.
  - Very rarely (2.7% of acute admissions) the resident is unable to return to their facility upon discharge from hospital, and as a result is classified as Alternate Level of Care (ALC) in hospital. This is equivalent to approximately 216 residents per year in B.C. hospitals.
  - The average length of stay for a care facility resident admitted to hospital is 7.9 days; and for those who experience an extended hospital stay and/or are not able to return to their residential care facility, ALC status adds almost three weeks to a hospital stay.
  - Facilities with funded direct care hours of greater than 3.11 hours (the median) per resident per day were less likely (4%) to be admitted to hospital following transfer to emergency department when compared to facilities where funded direct care hours were at or below 3.11 hours



Decision to Admit: Contracted versus Public

The major impetus for this research project was the fairly consistent frustration expressed by many front line clinicians in the emergency department that some care homes were sending their residents to the emergency department too frequently and refusing to accept them back in a timely manner.

The data do support the first observation from emergency department clinicians that contracted care facilities are sending residents to the emergency department more frequently than public facilities, even though the data indicate they care for less complex and frail residents. The data also support the observation of some clinicians that, all things being equal, the contracted care facilities are not accepting the residents back to the facility as quickly as the public facilities, resulting in longer lengths of stay, higher conversion to alternative level of care (ALC) and higher rates of death in hospital. The data specifically demonstrate:

- Contracted facility residents have a **34% higher** hospitalization rate than residents in publicly operated facilities.
- Contracted facility residents have hospital lengths of stay that are **32% longer** than residents from public facilities experience.
- Residents from a contracted facility are almost **twice as likely (47%)** to experience an extended length of stay resulting in ALC status.
- Residents from contracted facilities have ALC lengths of stay that are **9% longer** (almost 7 days longer) than residents from a publicly operated facility.
- Residents from contracted facilities have more admissions to hospital for certain conditions, even though they have a lower prevalence of the condition:
  - COPD – 64% higher rate of admission but 7% lower prevalence
  - CHF – 48% higher rate of admission but an 11% lower prevalence
  - Pneumonias – 38% higher
- Residents from contracted facilities are **54% more likely** to die in hospital.

These data indicate there is a significant potential for reducing costs in our health care system if contracted facilities performed as well as public facilities in relation to emergency department transfer, hospital admission and hospital discharge.

Why Are Contracted Facilities Underperforming?

Trying to pinpoint the exact reason for the underperformance of the contracted care facilities is difficult and indeed it is likely multifactorial. With a pattern that is consistent for standard hospitalization measures—transfer, admission, length of stay, conversion to ALC and death in hospital each demonstrate statistically significant poorer outcomes for contracted facilities versus public facilities—the question of "why" inevitably comes to mind. In order to find the answer, we must first have the courage to ask difficult questions.

We know the pattern is not related to differences in the condition of the residents or the funded hours of care between public and contracted operators. We know that public and contracted facilities have the same rate (23.5%) of "do not hospitalize" (DNH) orders. We know that the pattern is sufficiently pervasive that it is not about an individual care provider. However, the decision to call the ambulance and the discussion with the physician or nurses at the hospital about the resident returning home is done by/with staff in the care home. What is it about the culture in contracted care homes that, on balance, makes the staff more likely to send someone to the hospital and more hesitant to support their return to the facility?

Continuity of care has been well researched as linking to better health outcomes, and this holds particularly true in reducing hospitalization. Knowing the resident and their conditions would certainly be helpful in determining when changes might require a trip to the hospital, but if staff is changing frequently, continuity of care is compromised. Do we see less continuity of staff in contracted facilities?

We know that in public facilities there is actually good continuity. The Health Employers Association of British Columbia (HEABC) reports that 84% of staff who worked in public care homes in 2017 also worked in that same care home in 2016; this data includes casuals. If casuals are excluded, the data show that 94% of regular staff are consistent year over year. Unfortunately, we do not have any comparable data on staff turn-over for contracted facilities. We do know that there is turn-over in some of the contracted facilities who contract their clinical staff from another company. Often referred to as "contract flipping," some facilities change companies they have contracted with to provide care and a mass lay off of workers may often be the result. Does this have an impact on continuity of care? Indeed, what about the practice of contracting out care in general— does this have an impact?

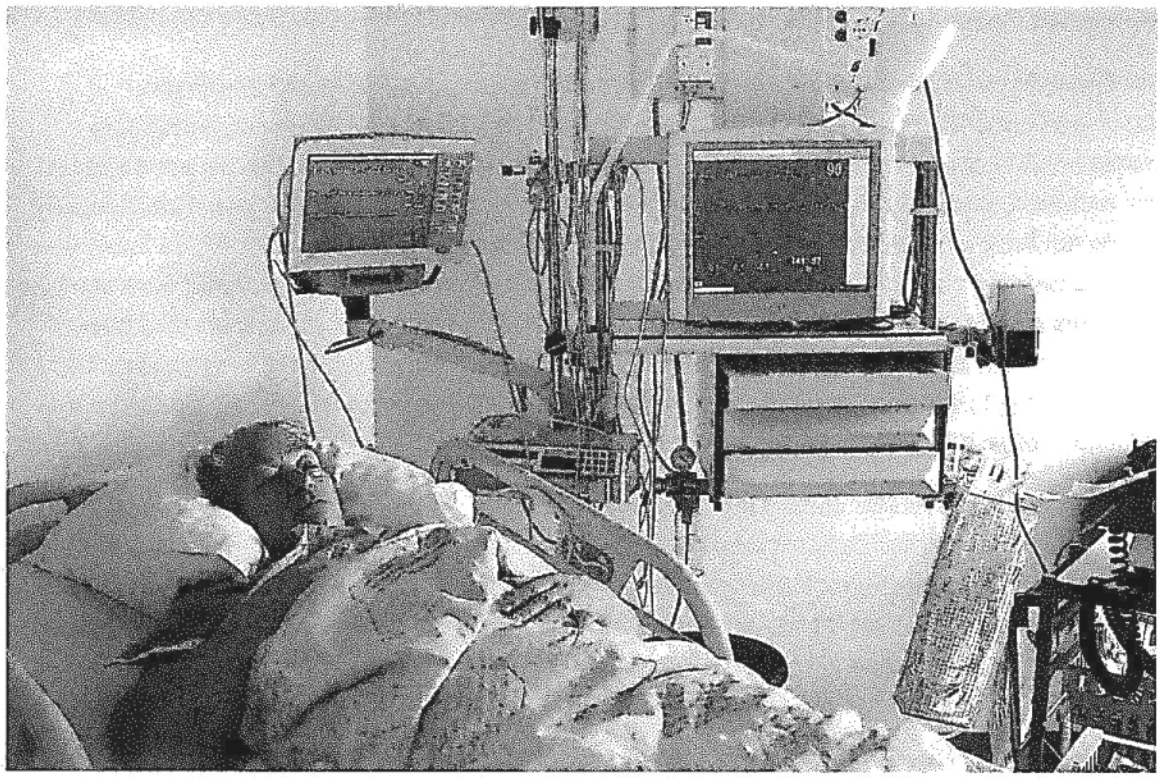
We know that, on average, contracted care facilities pay lower wages than public facilities. Only 54 out of 187 contracted facilities pay the funded wage rate and benefits of the master collective agreement ($23.95 per hour); the other facilities pay less, some of them much less (some are below $19 per hour). Is this attracting less experienced staff and/or is it adding to turn-over as care aides may seek opportunities for higher paying and/or more stable jobs in another facility? If care staff in all publicly funded facilities were required to receive comparable wages and benefits, would there be a more stable workforce?

What ongoing education and clinical support is available to care staff in contracted facilities? Is it different than what is provided in public facilities? Is there access to clinical nurse specialists and

clinical educators? Are clinical staff supervised by an RN or an LPN? Does this make a difference?

Have we properly aligned the financial incentives for the contracted care homes to ensure optimal care and outcome for the residents? We know that contracted facilities are permitted to pay less in wages for care staff despite being funded to pay at a higher rate. Is this the best way to ensure continuity of care with experienced staff to attend to residents clinical needs? We know that contracted care facilities continue to be funded for a bed that has been vacated by a resident that has been admitted to hospital. Have we created an incentive for a contracted facility to send a resident to the emergency department and resist the resident's quick return to the facility?

These are some of the difficult questions we need to ask if we want to understand why residents from contracted facilities transfer to the emergency department and are hospitalized more frequently than those in public facilities. There is a problem—that is clear from the data—but we cannot find solutions if we do not understand what is causing the problem. Undoubtedly, some contracted care providers will be uncomfortable with some of these questions and fixing the problem may have a financial impact on the care home operators' profitability. However, fixing the problem may also bring the care home operators more resources that will allow them to improve the outcome of care for their residents, and that is a goal that we should all embrace.



Why does this matter?

The rate of transfer to emergency, admission to hospital, length of stay, conversion to ALC and dying in a hospital bed has both a human and healthcare system cost. The cost to a resident cannot be understated in terms of distress at transfer to hospital and neither can the well-documented impacts of an acute care hospital stay for the frail elderly. Additionally, family members experience stress as they endeavor to communicate their family member's story and wishes to a myriad of clinicians in the acute care system, and almost no one wants to die in hospital. The system impacts of grid-locked hospitals is significant, and it too results in both human and healthcare system costs as staff struggle to provide quality care in an overburdened hospital.

Consider the potential system savings if contracted residential care facilities achieved the same level of success as the public care facilities in relation to hospitalization of residents.

Estimated costs (Health System Matrix database):

- An emergency department visit in B.C. is approximately $470
  - Potentially avoidable emergency department visits (contracted facilities) 1,700 annually
    - Total cost savings: **$799,000 annually**
- In-hospital cost per day ranges from $800 - $1,200
  - Potentially avoidable admissions (contracted facilities) approximately 800 annually
  - Average length of stay per admission from a contracted facility is 10 days
  - An average cost of $1,000/day hospital cost
    - Total cost savings: **$8,000,000 annually**
- In-hospital cost per day ranges from $800 – $1,200
  - Potentially avoidable ALC status admissions in 261 admissions/year
  - Average length of stay for ALC status is 28 days for contracted facilities
  - An average cost of $1000/day hospital cost
    - Total cost savings: **$7,308,000 annually**
- Total inpatient hospital days potentially saved
  - 800 admissions x 10 days length of stay = 8,000 days
  - 261 admissions x 28 days length of stay = 7,308 days
    - Total savings of **15,481 days or 42 hospital beds/day**

Total potential savings of $16,107,000 per year and 42 hospital beds <u>per day</u> in B.C.

The ALC (care facility) population is unique among ALC populations in that these individuals are already known to the system, have been assessed as meeting the criteria for admission to residential care, have an assigned residential care bed, and have care needs that are well-documented. The question to consider, then, is why a care facility individual would attract ALC status, rather than be returned to their residential care facility with augmented service, either until recovery or until an alternate service is available?

Remaining in hospital for 21 days (the B.C. average)—or, in the case of contracted facilities, an average of 28 days—is essentially occupying both a care facility bed and an acute bed. Challenges with congestion in our acute system strongly suggest that innovation in short term higher acuity resource allocation should be considered. An example of this could be directing home health RN resources to coach and support residential care nursing staff with technical skill tasks that occur infrequently in the care facility setting. Other opportunities could explore consultation from Respiratory Tech services to assess changes in condition for individuals with COPD and assist in symptom management strategies (as an example).

Overall, improving the rate of hospital transfer, admission and reducing the ALC length of stay indicates that approximately $16 million dollars could be re-targeted annually to other key health priorities (this is an estimated cost savings, and does not include impacts such as hospital congestion and overtime costs).

Conclusion and Recommendation

Everyone who works in the care community, whether in a contracted or public institution, goes to work each day thinking they are delivering the best possible care and making the best possible decisions for the residents. However, we must be guided by the evidence and it shows that, for a particular group of care facilities, there is a consistent and persistent pattern of poorer outcomes in the context of emergency department transfers and hospitalizations. The most obvious reasons for this discrepancy have been adjusted for in our review; it is not about resident acuity, funded care hours or different licensing standards.

To get the much-needed answers, we must do additional research and analysis, and this requires more and better information than we currently have on staffing differences between the contracted care facilities and the public facilities.

Reducing hospitalizations for seniors is a goal that is gaining increasing attention and for good reason; it benefits both the senior and the taxpayer. The Ministry of Health must take a leadership role in directing the health authorities to work with their contracted care providers to collect the standardized data necessary to determine the root cause of this discrepancy which will then allow us to make the necessary changes.

APPENDIX A

About the data:

- Four fiscal years: from April 1, 2012 to March 31, 2016.
- Resident characteristics, facility size, urban/rural status, facility admission and discharge dates, and the reason for discharge are from the Continuing Care Reporting System (CCRS). All care facilities in B.C. are required to submit information to CCRS.
- Funded direct care hours and ownership were compiled from data submitted to the Office of the Seniors Advocate by B.C.'s five health authorities.
- Emergency department visits: We looked at hospital admissions among all care facilities to the acute hospitals that report to the National Ambulatory Care Reporting System (NACRS). Since hospitals tend to admit from the their own emergency departments, this provided a way to select those care facilities (212) that transfer to NACRS hospitals only and are therefore properly represented in the emergency department data. NACRS is complete for all hospitals from April 1, 2014 to March 31, 2016 only, so the emergency department analysis is restricted to this time period of two fiscal years.
- Hospitalizations: All hospitals are required to submit to the Discharge Abstract Database (DAD).
- The Canadian Institute for Health Information (CIHI) administers the CCRS, NACRS, and DAD and provides B.C.'s data to the B.C. Ministry of Health, who in turn made the necessary data available. Personally identifying information, like date of birth and personal health number, was removed, and resident and facility identifiers were replaced with anonymized codes that supported linkage of records across datasets.

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Cook, Heather G HLTH:EX

From: Poss, Jeff W HLTH:EX
Sent: Monday, April 9, 2018 11:08 PM
To: Cook, Heather G HLTH:EX
Subject: Re: Office of the Seniors Advocate Report

Thanks for the report and the update on its status, Heather.

- Jeff

From: Cook, Heather G HLTH:EX
Sent: April-09-18 1:23 PM
To: Poss, Jeff W HLTH:EX; 'kim.mcgrail@ubc.ca'
Subject: Office of the Seniors Advocate Report

Hello both,

Please find attached a report from the Office of the Seniors Advocate on Residential Care Transfers to Acute Care. This report is a "shortened report" and focuses on the impact of transfers to the emergency department. The report was not released to the public, but may be posted on the OSA website (still under discussion).

Rather than release this report publicly, a decision was made to direct the report to the CEO's of Health Authorities, as the system level impacts of about $13M (at minimum) will be of greatest interest to CEO's. Further, the recommendation that Health Authorities should consider further investigation/research on the "why" query regarding the difference between owned/operated and contracted providers.

Please let me know if you have any questions.....

Thanks
Heather C

Heather Cook, RN, MScN
Director Systemic Reviews and Research
Office of the Seniors Advocate
1515 Blanshard Street
PO Box 9651 ST N
Provincial Government
Victoria, BC V8W-9P4
TEL: 1-778-698-9132
CELL: 1-250-893-9410

Cook, Heather G HLTH:EX

From: Jeff Poss <jwposs@uwaterloo.ca>
Sent: Wednesday, May 9, 2018 7:19 PM
To: Cook, Heather G HLTH:EX
Cc: 'McGregor, Margaret (mrgret@mail.ubc.ca)'
Subject: RC report

Hi Heather,

I shared the RC internal report with Lisa and Margaret; they understand that it is only being circulated within the HA CEO's.

Margaret as you may know is on the board of Vancouver Coastal, and she believes the report would be helpful in terms of this board's understanding of residential care. She is wondering if there is any way she can share it with her board, with the understanding that, as with all board documents, the report would be treated confidentially and would not be distributed further.

We realize there are protocols and sensitivities around this, but hopefully Isobel would be able to give permission for this request, or failing this estimate when it might be possible.

Thank you - Jeff

Jeff Poss, PhD
Associate Adjunct Professor
School of Public Health and Health Systems
University of Waterloo

Health Services Research Consultant
Vancouver

Cook, Heather G HLTH:EX

From: Jeff Poss <jwposs@uwaterloo.ca>
Sent: Tuesday, July 10, 2018 12:40 PM
To: Cook, Heather G HLTH:EX
Subject: RE: Checking in

Thanks Heather,

s.22

Will keep in touch - Jeff

From: Cook, Heather G HLTH:EX [mailto:Heather.G.Cook@gov.bc.ca]
Sent: July-10-18 12:31 PM
To: Jeff Poss
Subject: RE: Checking in

Hi Jeff,

s.22

Re the report on ED transfers from res care:

At this point there is no intent to distribute the report more broadly. We do know from feedback with Health Authorities that they are looking at the report. Whether they will adjust service models or expectations of contracted providers will remain to be seen.

I will be interested to see the more indepth paper that you are developing, and appreciate you keeping us in the loop. Otherwise, hope you enjoy the rest of your summer!

thanks

Heather Cook, RN, MScN
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From: Jeff Poss [mailto:jwposs@uwaterloo.ca]
Sent: Tuesday, July 10, 2018 12:20 PM
To: Cook, Heather G HLTH:EX
Subject: Checking in

Hi Heather,

Hope things well with you and with the OSA.

s.22

Wanted to ask about any updates or responses that you can share from the residential care report that went to the HA's. Do you anticipate any wider distribution of the report or elements of it?

Kim, Margaret, Lisa and I continue to plan a journal paper on this work, and will keep you and Isobel in the loop as we go forward.

- Jeff

Jeff Poss, PhD
Associate Adjunct Professor
School of Public Health and Health Systems
University of Waterloo

Health Services Research Consultant
Vancouver

Cook, Heather G HLTH:EX

From: Mackenzie, Isobel HLTH:EX
Sent: Monday, August 27, 2018 3:08 PM
To: 'Jeff Poss'; 'McGrail, Kimberlyn'
Cc: Cook, Heather G HLTH:EX
Subject: RE: data tables

Thanks Jeff.

We are producing a document with the data, versus in the excel spreadsheet and will forward to you by end of the day today. My plan is to provide it to Sue and the BC Care Providers before the end of the day tomorrow.

From: Jeff Poss [mailto:jwposs@uwaterloo.ca]
Sent: Monday, August 27, 2018 2:57 PM
To: Mackenzie, Isobel HLTH:EX; 'McGrail, Kimberlyn'
Subject: RE: data tables

My go at a set of tables that back up nearly all of the quantitative statements in the report.

The few not covered include do-not-hospitalize (2011 data), and the costs/days avoided.

-Jeff

From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
Sent: August-27-18 11:59 AM
To: Jeff Poss; 'McGrail, Kimberlyn'
Subject: RE: data tables

Yes, my non- technical opinion is simply the size of the dataset and time span would wash out the effect of any of this. I think what Sue is going to try to argue is that the contracted sites accept a lot of transfers from the public sites. I am not sure that is correct and I am not sure how this would change the result as it applies to both contracted and public.

From: Jeff Poss [mailto:jwposs@uwaterloo.ca]
Sent: Monday, August 27, 2018 11:17 AM
To: Mackenzie, Isobel HLTH:EX; 'McGrail, Kimberlyn'
Subject: RE: data tables

OK – just off another call.

I think the prospect of transfers making a resident appear in both types of ownership simultaneous is not likely at all, but I can go back check both my methods and Lisa's model prep.

Regarding the requirement of the Cox models violating proportionality, it's unlikely to alter things in my view, but would welcome Lisa's and Kim's opinion.

Will call you now - Jeff

From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
Sent: August-27-18 10:10 AM

To: Jeff Poss; 'McGrail, Kimberlyn'
Subject: FW: data tables

Jeff:

Can you read Sue's email below and give me a call.

Thx
Isobel

From: Sue Emmons [mailto:suee@northcrestcare.ca]
Sent: Monday, August 27, 2018 10:05 AM
To: Mackenzie, Isobel HLTH:EX
Cc: XT:HLTH Emmons, Sue
Subject: RE: data tables

Thanks again Isabel.

Last week in my e-mail I mentioned the issue of resident transfers from owned & operated sites to contracted sites. This weekend I've re-read the memo you sent out and the ER report and reviewed COX regression models. I would like to suggest the issue of transfers be assessed by the researchers. I know the data sets used in the analysis reasonably well, especially the DAD – (having had responsibility for Health Records for many years, including VCHA). I think there's a real possibility that the O&O and contracted data sets used by the researchers are NOT mutually exclusive (i.e. the same resident may be in both data sets). The Cox regression model measures 'risk of hazard' (death, hospital admission etc.) over time. The time period for transferred residents is split into two if residents are transferred (early part at O&O sites and later parts at contracted sites, generally). I don't think the Cox model allows for a study participant to be in both arms of the same study. This may very well be impacting the validity of the data and the results.
Also, one of the big assumptions of the Cox model is the proportionality of the two arms of the study over the time periods studied. If would be great if the researchers could comment on the analysis they used to validate proportionality.
Lastly, the covariate of 'co-location' with an acute site could easily be added to this analysis (1 for yes, 0 for no) – it would be interesting to see the results. It may be a great explanatory variable.

I will be attending the de-briefing on Thursday morning but felt these questions were a bit too technical for me to ask and better written down.

Regards,
Sue

From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
Sent: Aug-23-2018 4:16 PM
To: Sue Emmons
Subject: RE: data tables

Hi Sue:

Yes, my plan is to get them to you and to the BC Care Providers before the briefing. I was hoping to have them yesterday, It is a challenge as both Jeff Poss and Kim McGrail s.22 and communication is spotty. Not sure about the data models for regression, I think all we can give you are global numbers.
Isobel

From: Sue Emmons [mailto:suee@northcrestcare.ca]
Sent: Thursday, August 23, 2018 4:13 PM
To: Mackenzie, Isobel HLTH:EX
Subject: RE: data tables

Hi Isobel:
In your e-mail below you mentioned sending me the summary tables from which the conclusions of the ER study were drawn.
I haven't received anything yet. I'd love to be able to review them before the de-briefing next week if that's possible.
The data models used for the regression analysis would also be useful if they are available.
Regards,
Sue

From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
Sent: Aug-20-2018 3:17 PM
To: Sue Emmons
Subject: RE: data tables

Hi Sue:

I don't think what we can give you will give the type of detail you are looking for, but it might help. The HA sites co-located with hospital showed some slight correlation but not significant. Even if they were co- located if they were using the ED for xray/lab test it would show as an admit to ED.

You raise an interesting point on transfers and we might work up the numbers. Certainly what I hear is the transfers from contracted to HA sites based on acuity. I don't think there are many, if any ALC placements that came from an HA site and was then placed in contracted, but I think we can breakdown the number. Latest CIHI shows BC at about 24% of admits to res care come from another care facility (with nursing care). This is much higher than Ontario and Alberta but about on par with Manitoba and Sask. It would be interesting to look at where those transfers are coming from and going to and if there is a pattern. I think there are about 10-11k admits a year, so it is about 2500 admits from transfers- I will see if we can parse that data.

Regards
Isobel

From: Sue Emmons [mailto:suee@northcrestcare.ca]
Sent: Monday, August 20, 2018 1:54 PM
To: Mackenzie, Isobel HLTH:EX
Cc: XT:HLTH Emmons, Sue
Subject: RE: data tables

Thanks so much Isabel, nice to hear from you.
Must admit I find the ER findings interesting. s.22 I would love to see this data so thanks again.
As you know from your own experience in LTC, there are lots of transfers from Owned and Operated sites to contracted sites and very few the other way around – I'm wondering if rate denominators took this into consideration. I'm also wondering about the impact of co-location of O&O sites with acute sites & availability of lab tests/X-rays etc. on site (i.e. ability to rule out fractures/pneumonias etc. without a transfer to ER).
Not sure the data will be at a level of detail to look at this but if it is, it may explain some of the trends being observed.
Thanks for the heads up about the webinar on the 30th.
Regards,
Sue

From: Mackenzie, Isobel HLTH:EX [mailto:Isobel.Mackenzie@gov.bc.ca]
Sent: Aug-20-2018 1:06 PM
To: Sue Emmons
Subject: data tables

Hi Sue:

We will be able to send some data tables to you in the next few days. Unfortunately, the actual data used is the jurisdiction of CIHI and you will need to receive it from them. However the aggregate numbers for the indicators we reported on are simple enough I think. Dr. Poss and Dr. McGrail are the folks that did the calculations and I am trying to connect with now to get the information to you.

Also, a notice will be going out soon that the OSA is hosting a discussion on the report through webinar on August 30th at 1000. You may have already received notice from BCCPA- but we will go over the r port in more detail and answer questions then as well.

Thanks
Isobel