

# RCI



## Let's talk about data ;-)

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RCI Project Manager

# RAI (CIHI) Data



## **RAI?**

- Resident Assessment Instrument (the database)

## **CIHI?**

- Canadian Institute for Health Information (the organization maintaining the database)

## **It's accessible?**

- Yes! (But get some help to mine it, if you can)
- <https://divisionsbc.ca/provincial/RClwebinars>

# RAI (CIHI) Data



## How we got it

- The HA provides it to us, based on a request made about 18 months ago.
- HA's staff extract the data and provides it to our QI Coordinator, who rolls with it.

## Why you need it

- It's the only source for two key indicators: Percentage of patients on antipsychotics without a diagnosis of psychosis, and Percentage of patients on nine or more meds

# RAI (CIHI) Data



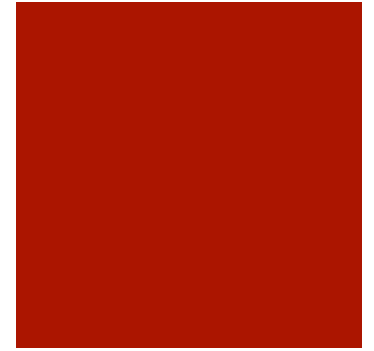
## The data we use

1. Percentage of patients on antipsychotics without a diagnosis of psychosis, and
2. Percentage of patients on nine or more meds
  - There are quite a few more that are available.

## Data Quality

- It's decent
- The quality of the RAI coding is critical

# RAI (CIHI) Data



## RAI coding notes

- Nurses typically enter the data
- Data is entered based on charts
- Data accuracy starts with charts, then data entry
- Coding story...

# RAI (CIHI) Data



## Data treatment and Analysis

- Analyzed data per facility, per quarter
- Presented in tabular and graph form
- Unadjusted = better for comparing results over time
- Adjusted = better for comparing facilities of similar size
- Sometimes it's a straight translation in graphs, sometimes calculations are needed (Percentage for region => extract crude numbers => reassign percentage by facility, based on beds per facility)

# RAI (CIHI) Data

## Why we do it

- It has allowed to loop RAI data back to facilities



# Health Authority Data



## How we got it

- Went to IH's CEO through the Res Care portfolio holder, and we diligently receive it twice a year.
- The HA's motivation? Diverting RC patients from ED
- Look for a Director for Residential Care (or the like?)

## Why you need to get it

- You need the data in a timely manner to fuel “un-siloed” system-level discussions at the local level, where change really happens. Providing data is likely the cheapest, most direct way to improve the system from the ground up.



# Health Authority Data



## The data we use

- ED visits by facility
- Admissions via the ED per facility
- ED visits for our HA overall
- Admissions via the ED for our HA overall

## Data quality

- Decent, but not 100% (hospital transfers?)
- Acknowledge variance, name possible factors, follow-up with facilities as needed.

# Health Authority Data



## Data Analysis

- Column graph of ED visits per facility per year vs. HA and BC average
- Table with numbers for each facility. Comparison of 2015 and calculated 2016 numbers.
- Sometimes it's a straight translation in graphs, sometimes calculations are needed (Percentage for region => extract crude numbers => reassign percentage by facility, based on beds per facility)
- It's even more fun when you can translate your RCI outcomes into \$ amounts...

# Health Authority Data



## Why we do it

- Critical source of data
- We're in this together, are we not?
- Best reason to maintain excellent working relationships

## Indicators

1. Complex Care Client ED Visit/CC Bed
2. Complex Care Clients Admitted as Inpatients
3. CC Clients on Nine or More Medications
4. CC Clients on Antipsychotics without a Diagnosis of Psychosis
5. 24/7 Availability and On-site attendance when required
6. Proactive Visits to Residents
7. Completed Documentation
8. Participation in Case Conferences
9. Satisfaction with Relationship

# Complex Care Client ED Visit/CC Bed Kootenay Boundary – 2015 and 2016

|                       | 2015        | April 1 -<br>Sept 30,<br>2016 | x2 to<br>annualize<br>for 2016 |
|-----------------------|-------------|-------------------------------|--------------------------------|
| Rose Wood             | 1.11        | 0.18                          | 0.36                           |
| Silver Kettle         | 1.08        | 0.33                          | 0.66                           |
| Slocan Health Ctr.    | 0.85        | 0.31                          | 0.62                           |
| Talarico Place        | 0.44        | 0.11                          | 0.22                           |
| Castleview            | 0.42        | <0.05                         | <.1                            |
| Victorian Health Ctr. | 0.39        | 0.33                          | 0.66                           |
| Columbia View         | 0.37        | 0.16                          | 0.32                           |
| Poplar Ridge          | 0.33        | 0.15                          | 0.30                           |
| Hardy View            | 0.27        | 0.17                          | 0.34                           |
| Mountain Lake         | 0.18        | 0.08                          | 0.16                           |
| Nelson Jubilee        | 0.05        | <0.05                         | <.1                            |
| <b>IH Overall</b>     | <b>0.66</b> | <b>0.3</b>                    | <b>0.60</b>                    |

←  
Back of envelope calculation – likely underestimate as rates go up in the winter

Facilities in green are substantially down.

**Note that all facilities are at or below the IH average**

\*Numbers not available for Minto House, Castleview and Nelson Jubilee because totals <5 are suppressed

\*\*Overall rate for IH for period of April 1 – Sept. 30 down from .34 in 2015 to .30 in 2016

## 2. Complex Care Clients Admitted as Inpatients via ED and LOS - IH Overall – 2015 and 2016

|                        | 2015  | April 1 –<br>Sept 30,<br>2016 | X2 to<br>annualize<br>for 2016 |
|------------------------|-------|-------------------------------|--------------------------------|
| # of ED Visits         | 3,543 | 1582                          | 3164                           |
| Admitted as Inpatients | 1,249 | 531                           | 1062                           |
| Percentage Admitted    | 35%   | 34%                           | 34%                            |
| Admitted via ED/CC bed | 23%   | 10%                           | 20%                            |
| ALOS (Days)            | 5.7   | 6.1                           | -                              |
| LOS 1-2 Days           | 449   | 170                           | 340                            |
| % LOS 1-2 Days         | 36%   | 32%                           | -                              |

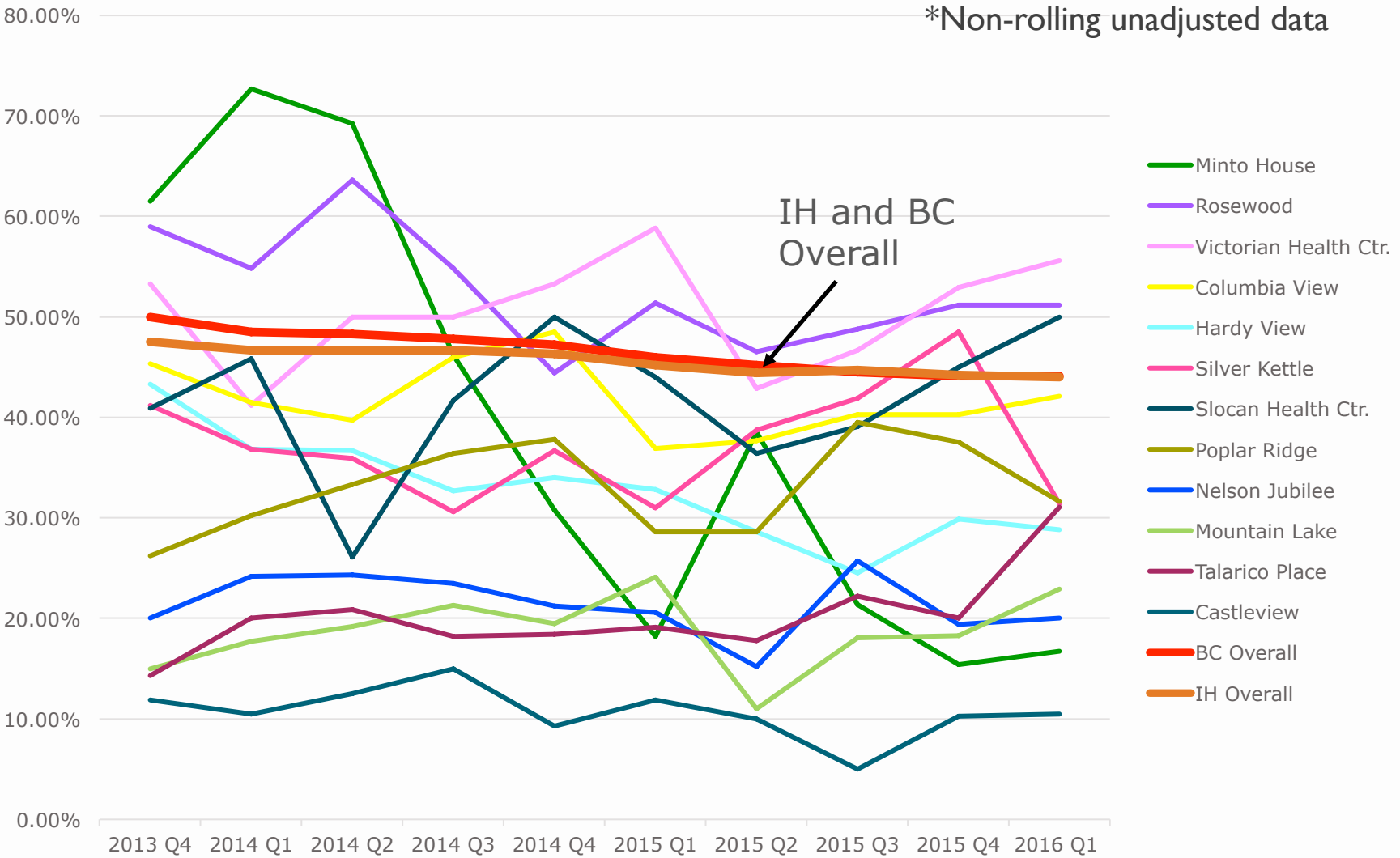
Adds up to **>7100 hospital days in 2015 and >6470 in 2016**

# Questions to consider...

1. What factors contribute to your site's ED transfers? Why might they be low or high?
2. Are there any unique challenges you experience in your community?
3. Where can you see building on strengths or making improvements?

# 3.

## Complex Care Clients on Nine or More Medications Kootenay Boundary Q4 2013- Q1 2016





# 4. Use of Antipsychotics without a Diagnosis of Psychosis Kootenay Boundary Q4 2013- Q1 2016

\*Rolling data

| Facility              | 2015 Q3 Adj | 2015 Q3 Unadj | 2015 Q4 Adj | 2015 Q4 Unadj | 2016 Q1 Adj | 2016 Q1 Unadj |
|-----------------------|-------------|---------------|-------------|---------------|-------------|---------------|
| Silver Kettle         | 40.40%      | 31.2%         | 34.60%      | 30.1%         | 40.90%      | 29.1%         |
| Poplar Ridge          | 31.40%      | 25.7%         | 35.40%      | 27.6%         | 38.70%      | 28.6%         |
| Slocan Health Ctr.    | 27.60%      | 34.1%         | 28.20%      | 38.8%         | 38.30%      | 44.6%         |
| Rose Wood             | 13.70%      | 19.7%         | 26.80%      | 23.0%         | 30.10%      | 25.3%         |
| Hardy View            | 23.00%      | 24.4%         | 25.10%      | 30.1%         | 28.80%      | 28.7%         |
| Minto House           | 23.60%      | 21.6%         | 15.70%      | 15.7%         | 21.50%      | 19.2%         |
| Mountain Lake         | 20.70%      | 27.1%         | 20.40%      | 27.4%         | 21.50%      | 27.2%         |
| Nelson Jubilee        | 27.80%      | 29.8%         | 24.50%      | 25.6%         | 20.60%      | 21.4%         |
| Columbia View         | 22.10%      | 20.7%         | 21.30%      | 20.2%         | 19.70%      | 19.2%         |
| Victorian Health Ctr. | 21.60%      | 18.9%         | 21.10%      | 18.5%         | 19.40%      | 16.7%         |
| Talarico Place        | 19.50%      | 19.2%         | 19.30%      | 20.0%         | 17.40%      | 20.0%         |
| Castleview            | 10.80%      | 10.8%         | 10.70%      | 10.6%         | 11.10%      | 10.8%         |

**BC Overall Adjusted** 27.4%  
Unadjusted 29.5%

**IH Overall Adjusted** 30.4%  
Unadjusted 31.5%

# Take-Home points



1. Focus on relationships between all care providers, AND data providers. System changes involves shared understanding of the need for change.
2. Have an ally within your HA – go to the CEO if needed.
3. Cultivate good working relationships with data folks. Invite them to your RCI events.
4. Data collection and analysis is just the start. Feed the digested data back to all interested parties. Don't assume floor staff is not interested – they're an integral part of the solution.

Get in touch anytime!



## Sylvain Turgeon

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~Physician Recruitment

~Continuing Professional Development

~Residential Care Initiative

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