

## Data Impact Challenge Answer Submission Template

### Template:

- Question:  
#3 Does prompt access to a discharge summary (within 2-4 days) by primary care providers reduce the rate of readmission and/or emergency department (ED) visits?
- Team and list of all team member names:  
Fred Agyepong  
Fred Ackah

### **Describing the Data and Analysis**

- Data Custodian Organization(s) and data sources:  
Alberta Health
- List of Datasets Used (e.g. names of database and/or data origins):  
**Alberta Health Care Insurance Plan Physician Claims Data** - The data relates to claims submitted for payment of Alberta service providers for health services delivered under the Alberta Health Care Insurance Plan (AHCIP).

**In Patient Discharge Data** – The data relates to inpatient (hospital morbidity) data collected electronically by Alberta Health and consists of one record for each inpatient separation (discharge, transfer, or death) in any of the acute care hospitals in Alberta, and for discharges for Albertans from the Lloydminster Hospital in Saskatchewan.

- Exclusions:  
N/A
- Nature and Size of Cohort (e.g. geographic area covered, number of patients included):  
The cohort is the number of GP visits after discharged from Alberta hospitals. The size of the cohort can be found in the table below
- Data timeframe:  
  
2009 – 2010 (April 01, 2009 – March 31, 2010)  
2010 – 2011 (April 01, 2010 – March 31, 2011)  
2011 – 2012 (April 01, 2011 – March 31, 2012)  
2012 – 2013 (April 01, 2012 – March 31, 2013)  
2013 – 2014 (April 01, 2013 – March 31, 2014)  
2014 – 2015 (April 01, 2014 – March 31, 2015)  
Fiscal Years

Please provide a brief summary of the analysis methodology:

Individuals who were discharged in a fiscal year were link to Physician Claims Data. These visits were restricted to a GP visit after the discharged date to provide the cohort of individuals needed for this analysis. Based on this methodology, a cohort meeting the discharge summary received within 3 days or less, discharge summary received in greater than 30 days or not received and Total, regardless of when discharge summary received were link back to Patient Discharge Data to determine the rate of 30 day readmission respectively.

### **Describing the Findings**

- Numerator and Denominator (as specified in the question definition)  
See table below

- Please also provide a brief summary of the findings including any key limitations or interpretation issues (may also include one figure/table)

discharge summary received within 3 days or less \*

Total_Cases	Year	Cases_IP	Cases_ED	Cases_Both	Rate_IP	Rate_ED	Rate_Both
98643	2010	71834	25942	78924	72.8222	26.2989	80.0097
103397	2011	76933	26961	83838	74.4054	26.0752	81.0836
106864	2012	79546	28331	86732	74.4367	26.5113	81.1611
109190	2013	81745	28763	88805	74.8649	26.3422	81.3307
111571	2014	83447	28771	90561	74.7927	25.7872	81.1689
111856	2015	85091	26412	91071	76.0719	23.6125	81.4181

discharge summary received in greater than 30 days or not received\*

Total_Cases	Year	Cases_IP	Cases_ED	Cases_Both	Rate_IP	Rate_ED	Rate_Both
191679	2010	26282	51563	59779	13.7115	26.9007	31.187
195327	2011	27396	52560	61077	14.0257	26.9087	31.2691
200849	2012	29044	55365	64139	14.4606	27.5655	31.9339
204395	2013	29845	56890	65910	14.6016	27.8334	32.2464
208471	2014	30057	56422	65443	14.4178	27.0647	31.3919
212039	2015	28093	47232	57169	13.249	22.2751	26.9615

Total, regardless of when discharge summary received

Total_Cases	Year	Cases_IP	Cases_ED	Cases_Both	Rate_IP	Rate_ED	Rate_Both
231311	2010	84224	73547	117522	36.4116	31.7957	50.8069
237524	2011	89471	75675	122922	37.6682	31.8599	51.7514
244010	2012	92380	79144	127012	37.8591	32.4347	52.052
248993	2013	94962	81426	130482	38.1384	32.7021	52.4039

255336	2014	97070	81206	132011	38.0166	31.8036	51.7009
252220	2015	97646	70169	125347	38.7146	27.8206	49.6975

From the table the rate of 30 day re-admission to inpatient setting after discharge summary received within 3 days or less is 3 times more likely than discharge summary received in greater than 30 days or not received.