



# 2015 Ontario Hospitals Maternal-Child Services Report LHIN-level Indicators

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## Definitions and Acronyms

### Local Health Integration Networks

LHIN 1	Erie St. Clair
LHIN 2	South West
LHIN 3	Waterloo Wellington
LHIN 4	Hamilton Niagara Haldimand Brant
LHIN 5	Central West
LHIN 6	Mississauga Halton
LHIN 7	Toronto Central
LHIN 8	Central
LHIN 9	Central East
LHIN 10	South East
LHIN 11	Champlain
LHIN 12	North Simcoe Muskoka
LHIN 13	North East
LHIN 14	North West



### Acronyms

<b>ALOS</b>	Average Length of Stay
<b>C</b>	Calendar Year
<b>CIHI</b>	
<b>DAD</b>	Discharge Abstract Database
<b>ED</b>	Emergency Department
<b>FY</b>	Fiscal Year
<b>IN</b>	Inpatient
<b>LHIN</b>	Local Health Integration Networks
<b>MH</b>	Mental Health
<b>NACRS</b>	National Ambulatory Care Reporting System
<b>OBS</b>	Obstetrical
<b>Paed</b>	Paediatric

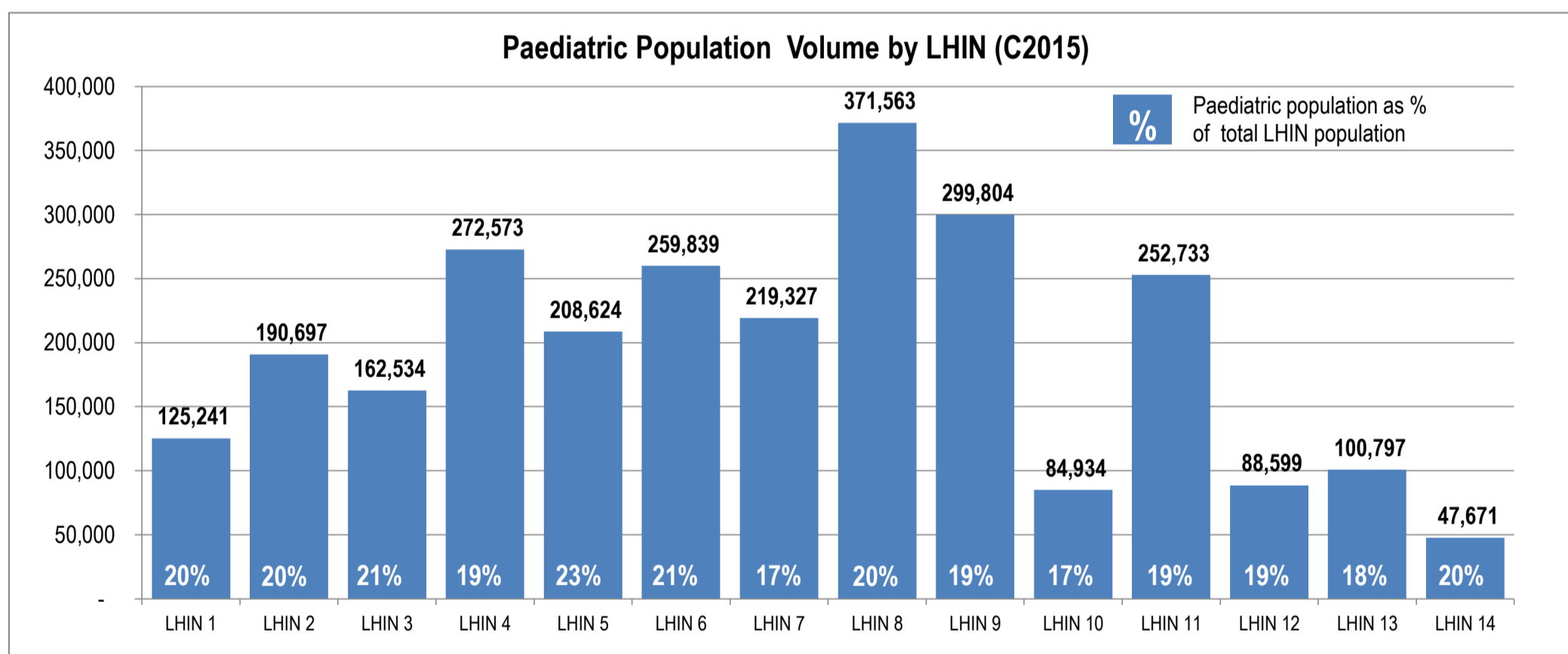
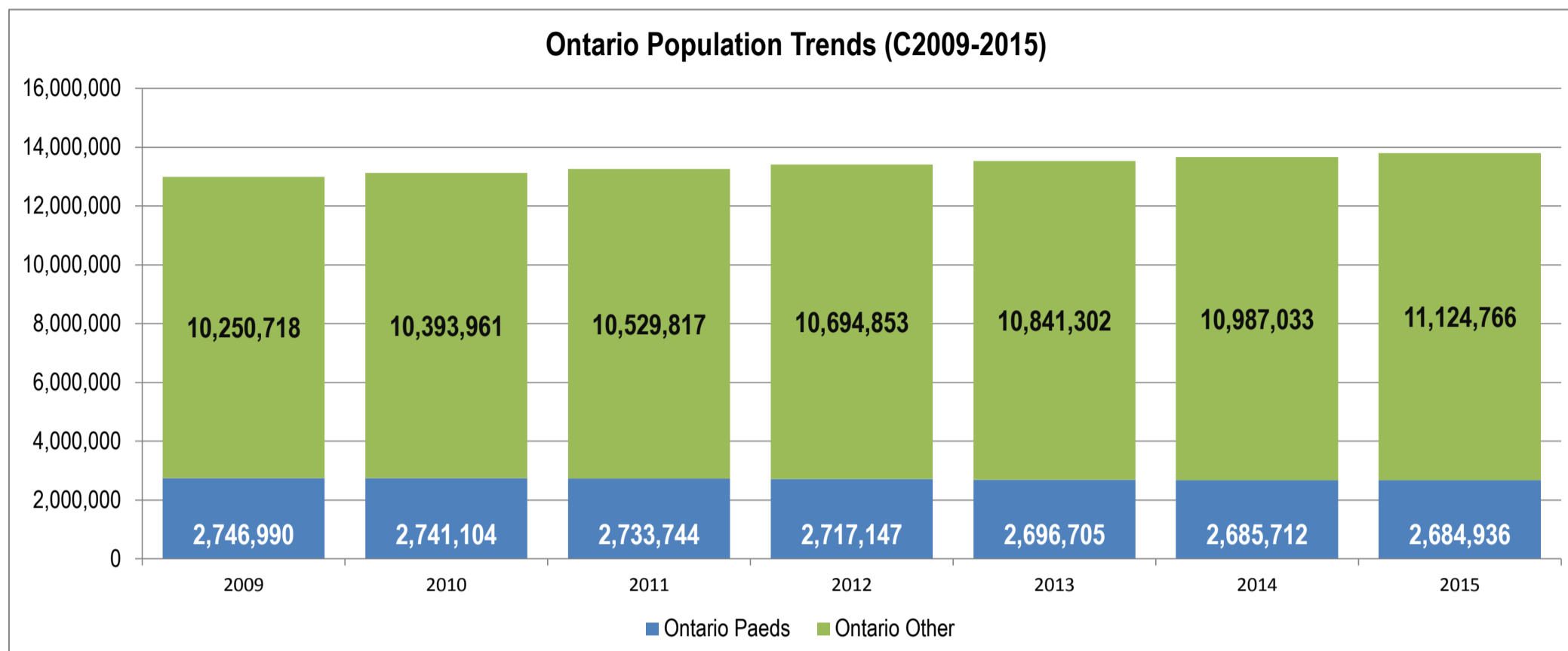
### Definitions

<b>Low Risk</b>	Low risk women are those whose pregnancies fall into Robson criteria 1 to 4, and who do not have any of the health conditions specified below: Maternal - autoimmune, cancer, cardiovascular, diabetes, gastrointestinal, genitourinary, haematological, hypertensive disorders in pregnancy, musculoskeletal, neurological, placental, pulmonary; Fetal – anomalies or complications).
<b>Paediatric</b>	From birth up to 18 years of age.
<b>1st trimester</b>	Defined as <13 weeks gestation.

## 1.0 Paediatric Population Overview

### Comments

The volume of paediatric population in Ontario - defined as 0 days to 18 years of age - has declined by 2% from 2009 (2,746,990) to 2014 (2,685,712). Relative to the overall provincial population, the proportion of paediatric population decreased from 21.1% in 2009 to 19.6% in 2014. Almost 35%, or 1 in 3, of Ontario's paediatric population are residing in LHIN 4 (273,449), LHIN 8 (369,115), and LHIN 9 (300,361). LHIN has highest proportion of paediatric population relative to the overall population (207,660 or 23%).



LHIN	Paediatric Population Trends by LHIN (C2009-2015)						
	2009	2010	2011	2012	2013	2014	2015
LHIN 8	363,872	367,713	369,284	369,080	367,964	369,115	371,563
LHIN 9	313,329	311,104	308,558	305,379	302,166	300,361	299,804
LHIN 5	205,498	208,057	210,104	208,901	207,413	207,660	208,624
LHIN 11	255,564	256,014	255,997	254,767	253,125	252,426	252,733
LHIN 1	137,023	135,081	133,386	131,577	129,386	127,023	125,241
LHIN 4	285,065	282,444	280,307	277,854	275,428	273,449	272,573
LHIN 6	257,162	258,191	258,759	259,491	259,697	259,397	259,839
LHIN 12	94,072	93,131	91,989	91,026	90,058	89,113	88,599
LHIN 13	110,443	108,670	107,379	105,403	103,455	101,877	100,797
LHIN 14	51,723	50,717	50,314	49,563	48,797	48,158	47,671
LHIN 10	92,964	91,510	90,061	88,569	86,804	85,550	84,934
LHIN 2	198,608	197,141	195,944	194,313	192,656	191,343	190,697
LHIN 7	217,854	217,835	217,746	217,693	216,880	217,840	219,327
LHIN 3	163,813	163,496	163,916	163,531	162,876	162,400	162,534

### Data Sources:

IntelliHealth: Population estimates by LHIN (2009-2013), and Population projections by LHIN (2014-2015).

### Notes:

All records in this section are presented by calendar year.

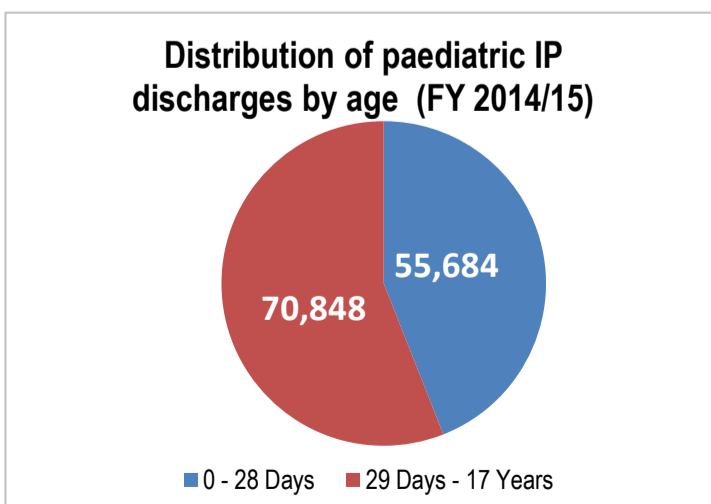
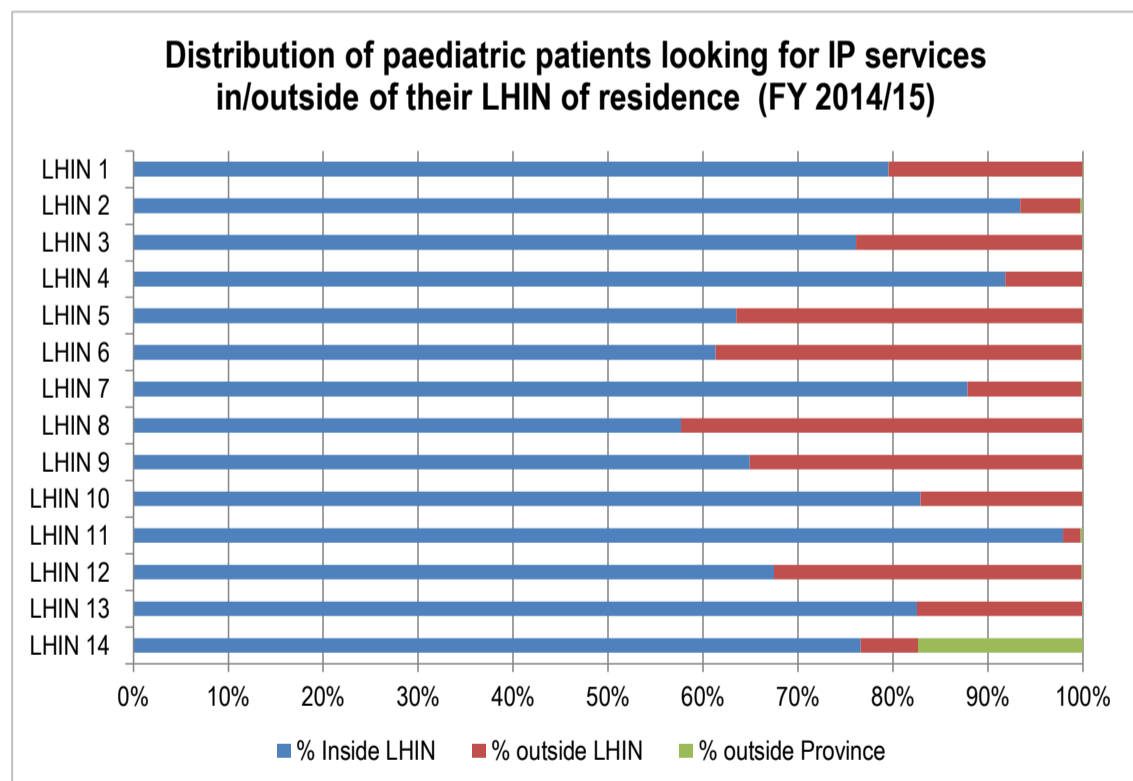
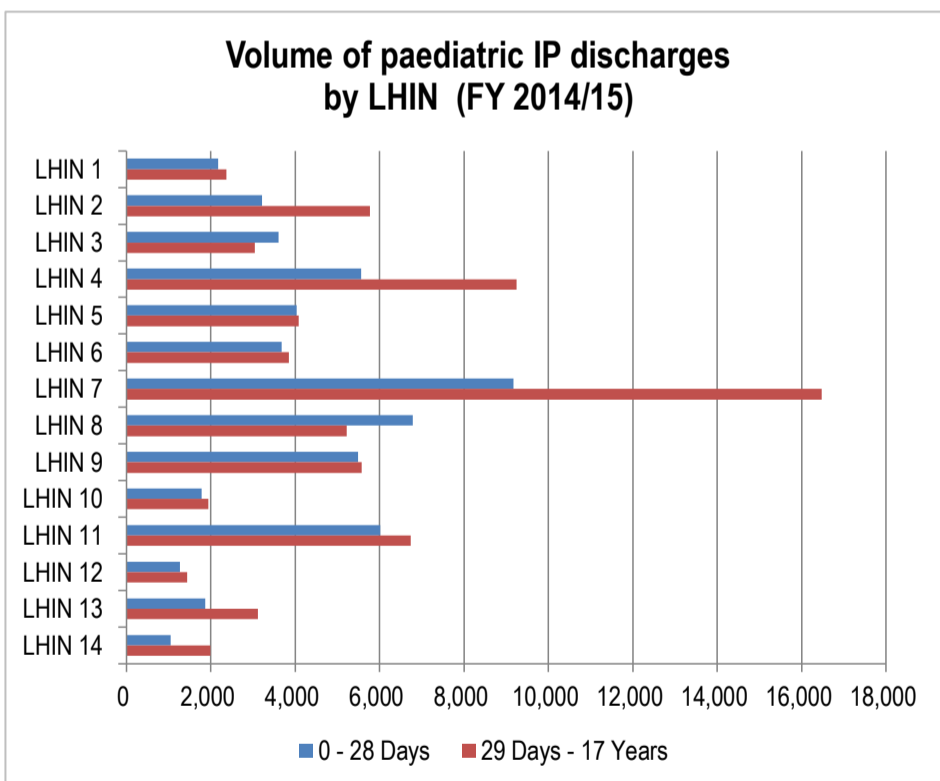
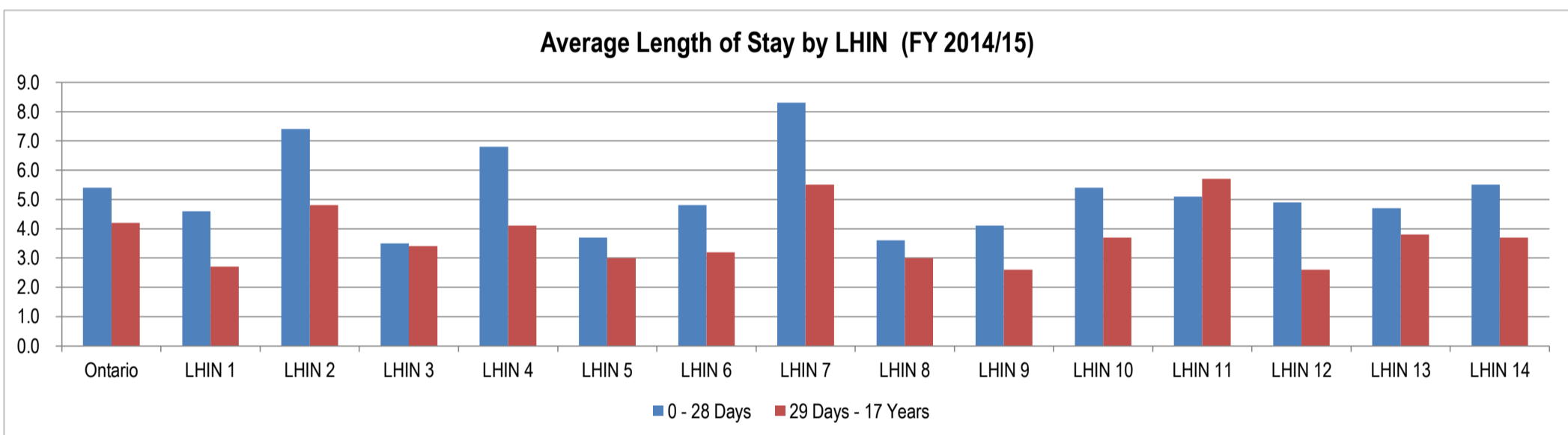
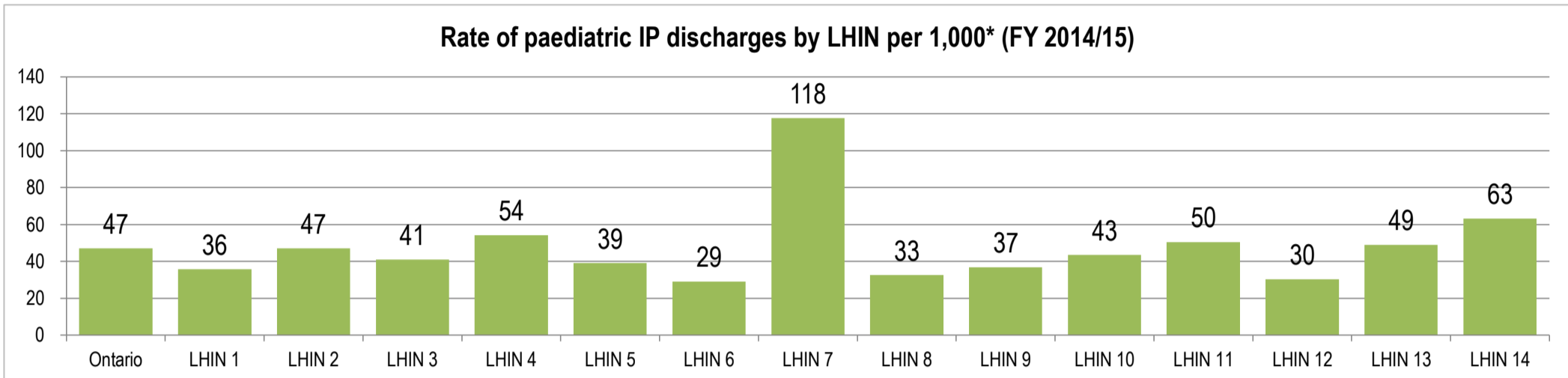
## 2.0 Paediatric Inpatient Hospital Discharges

### Comments

In FY 2014/15, there were 126,532 paediatric inpatient discharges in Ontario. Of those, 55,684 (44%) were neonatal patients (0-28 days). Approximately 20% of the volume (or 1 in 5 paediatric patients) is attributed to LHIN 7.

The Average Length of Stay (ALOS) for paediatric patients was 4.7 (ALOS=5.4 for neonates, and ALOS=4.2 for patients over the age of 28 days). ALOS for age 0-28 days group is longer than age 29-17 years group across all the LHINs except in the LHIN 11. The highest neonatal ALOS was seen in LHIN 6 (ALOS=8.3) and the highest ALOS for patients over 28 days was seen in LHIN 11 (ALOS=5.7).

One in four paediatric patients in Ontario were looking for inpatient services outside of their LHIN of residence. Of those, more than 800 paediatric patients used services outside of the province. The majority of this volume is attributed to the North West LHIN, where several hundred cases were transferred to Winnipeg.



**1 in 4**  
paediatric patients in Ontario are looking for inpatient services outside of their LHIN of residence. Of those, **>800** paediatric patients used services **outside of the province.**

**Data Sources:**  
Discharge Abstract Database (DAD), provided by the Canadian Institute of Health Information (CIHI).  
IntelliHealth: Population estimates by LHIN (2009-2013), and Population projections by LHIN (2014-2015)

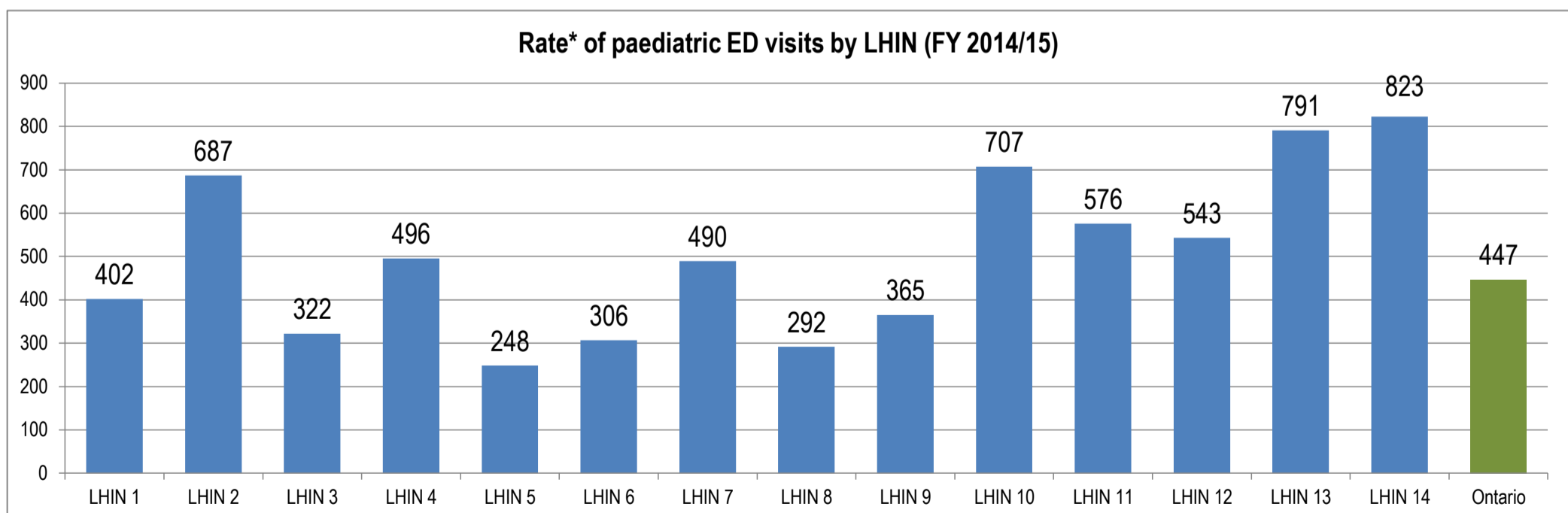
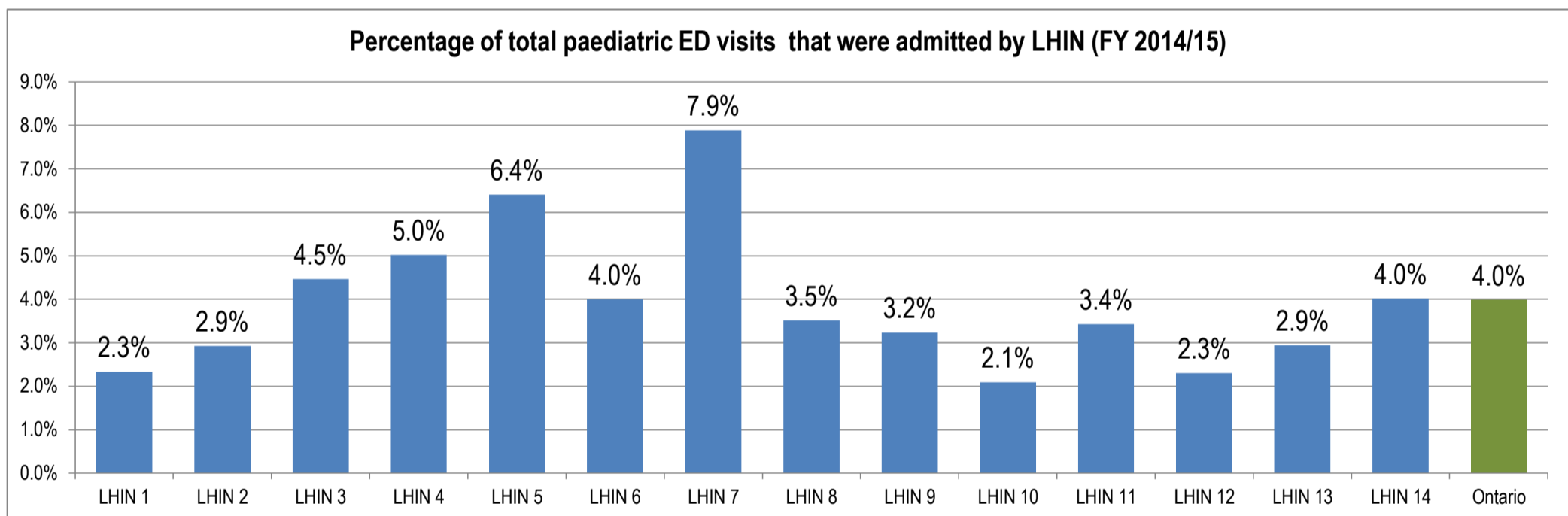
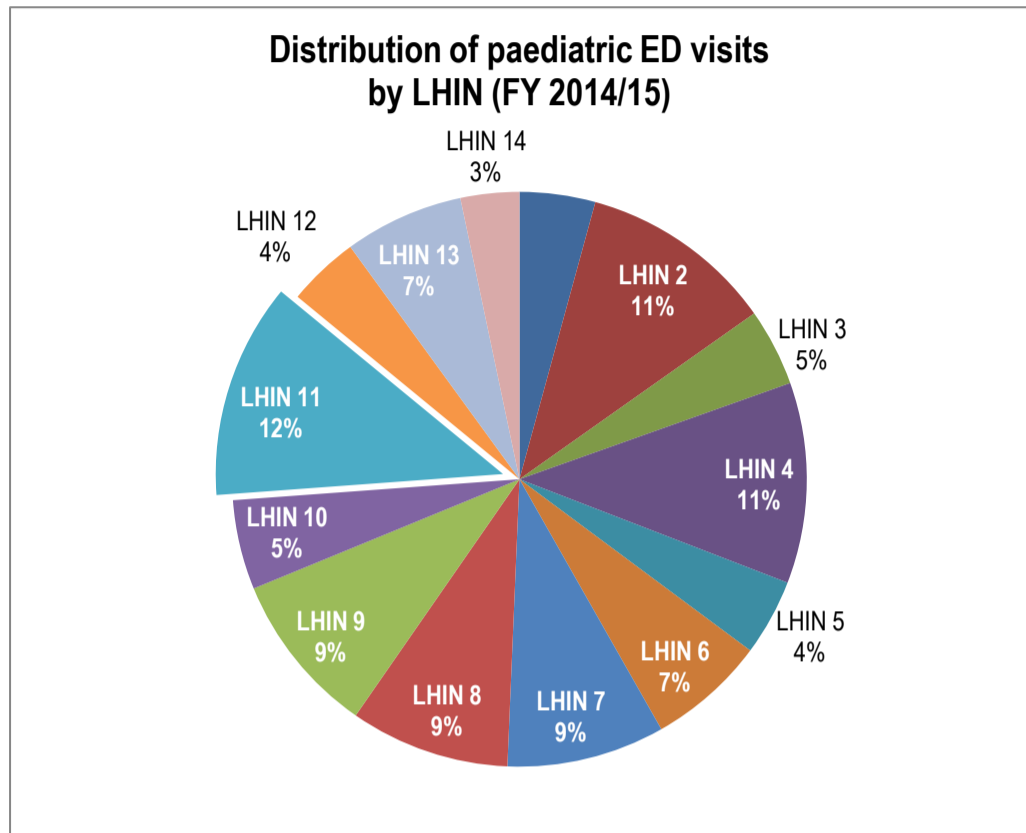
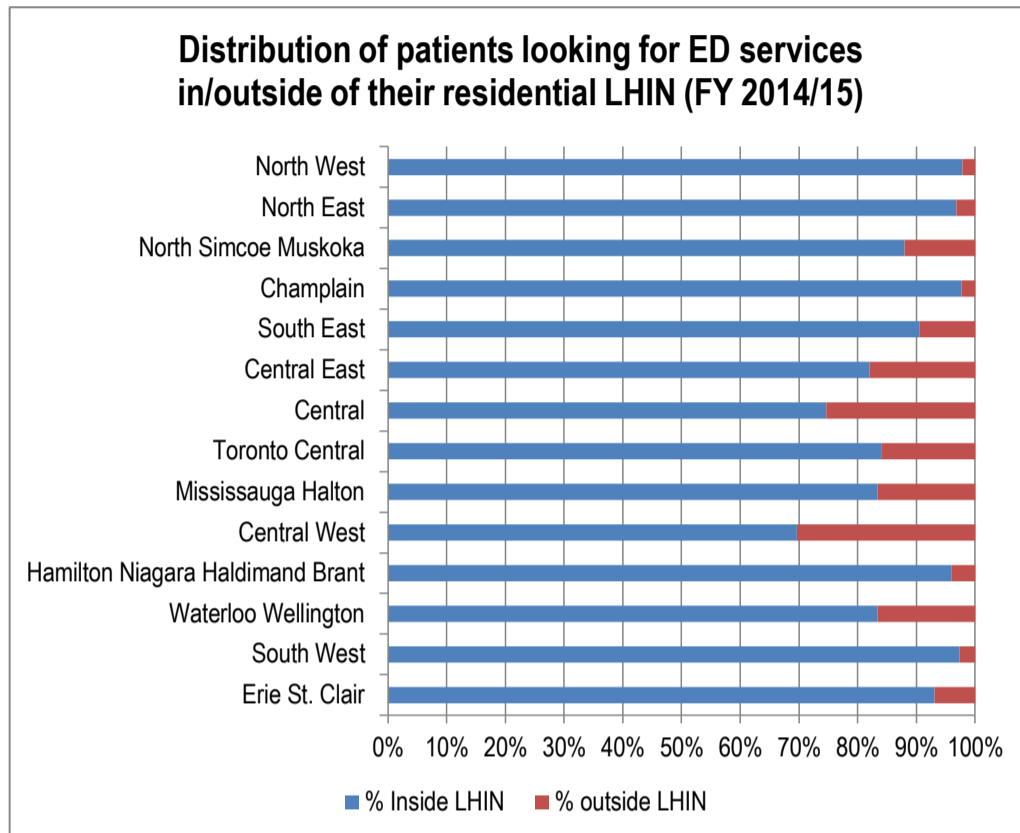
### 3.0 Paediatric Emergency Department Indicators

**Comments**

In FY 2014/15, there were 1,199,948 paediatric ED visits registered in Ontario. Approximately one third of this volume (34%) came from LHIN 2, LHIN 4 and LHIN 11 (11%, 11% and 12% respectively). This represents an average of 447 ED visits per 1,000 children between the ages of 0 and 18 years. The highest rate of ED visits was observed in LHIN 10, 13 and 14 (707, 791 and 823 per 1,000 respectively).

12% of paediatric patients were looking for ED services outside of their LHIN of residence. This represents a total of 134,878 children. Of note, approximately 1 in every 3 paediatric patients in Central and Central West LHIN are included in this group.

On average, 4% of paediatric patients were admitted to ED. LHINS 4, 5 and 7 saw the highest volume of ED admissions (5%, 6.4% and 7.9% respectively).



**Data Sources:**  
National Ambulatory Care reporting System (NACRS), provided by the Canadian Institute of Health Information (CIHI). IntelliHealth: Population estimates by LHIN (2009-2013), and Population projections by LHIN (2014-2015).

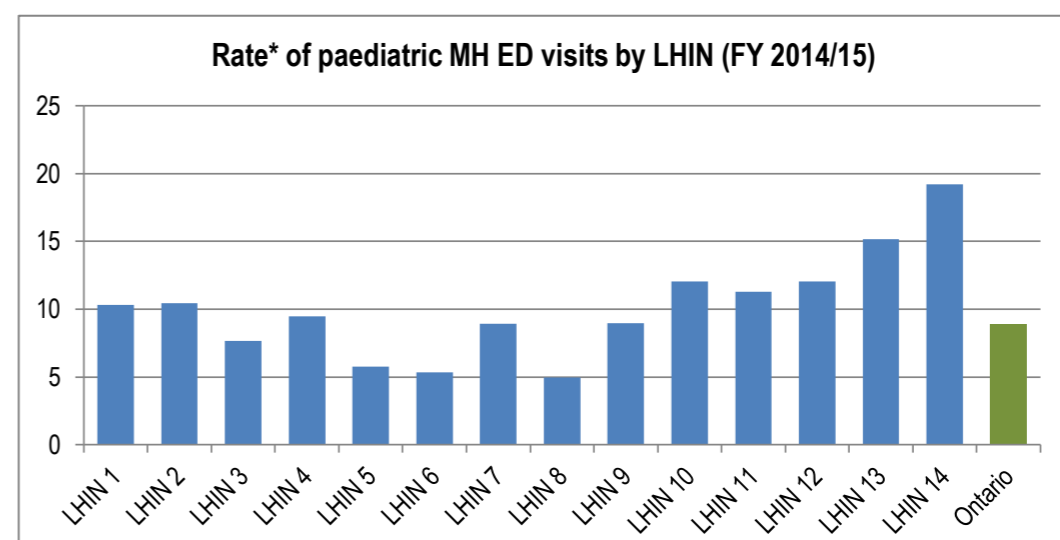
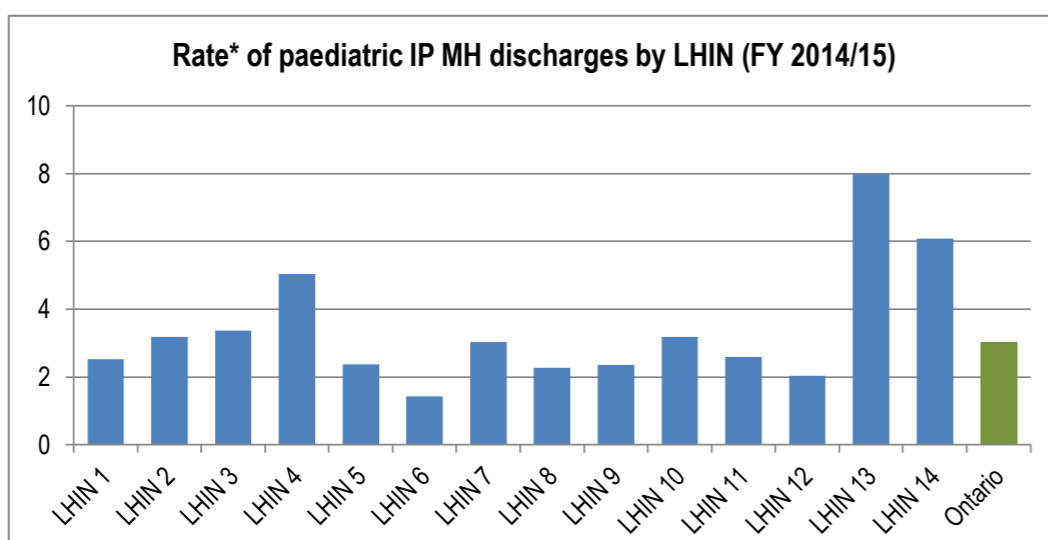
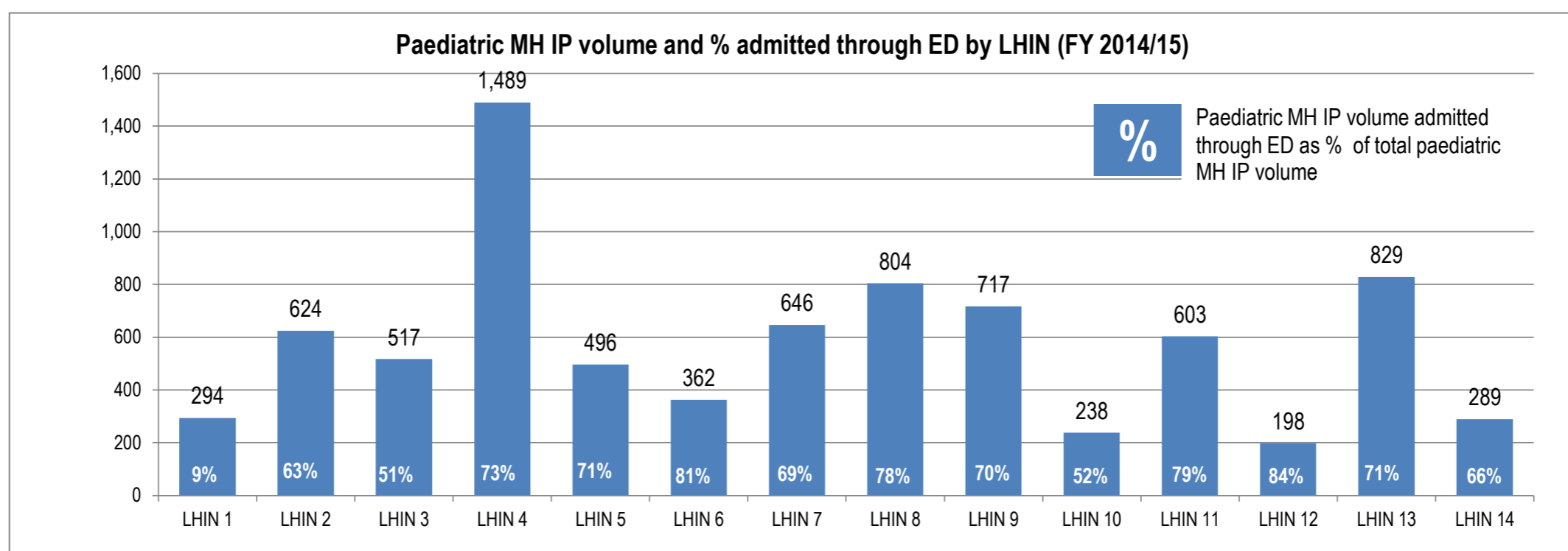
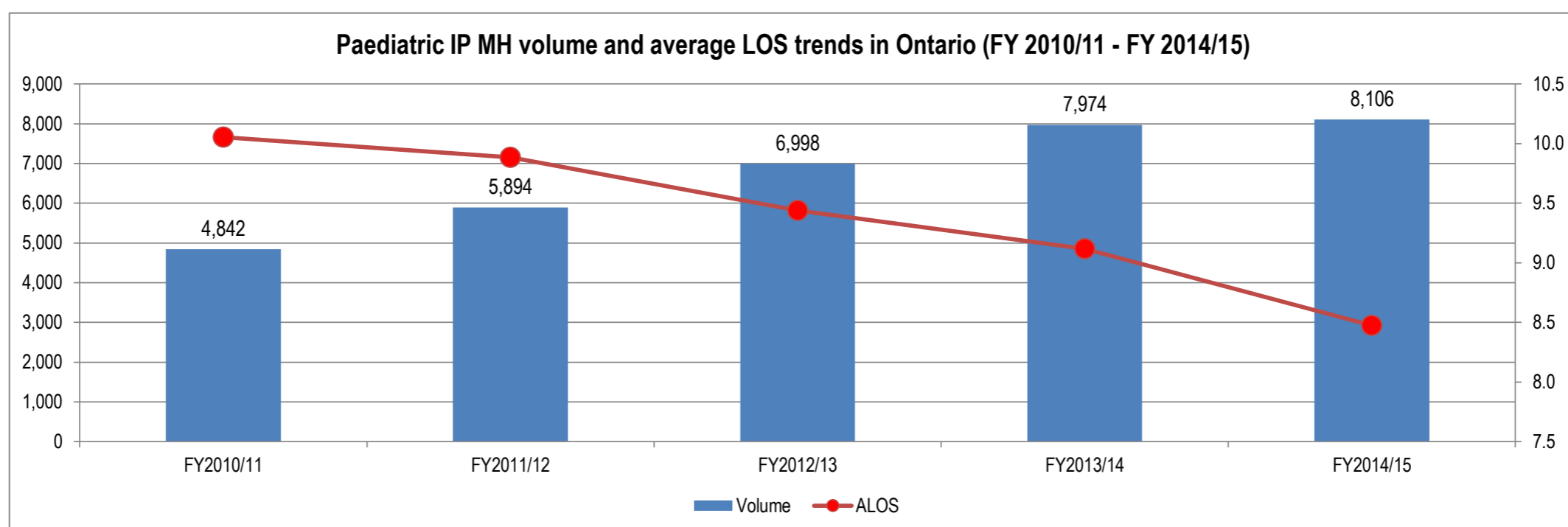
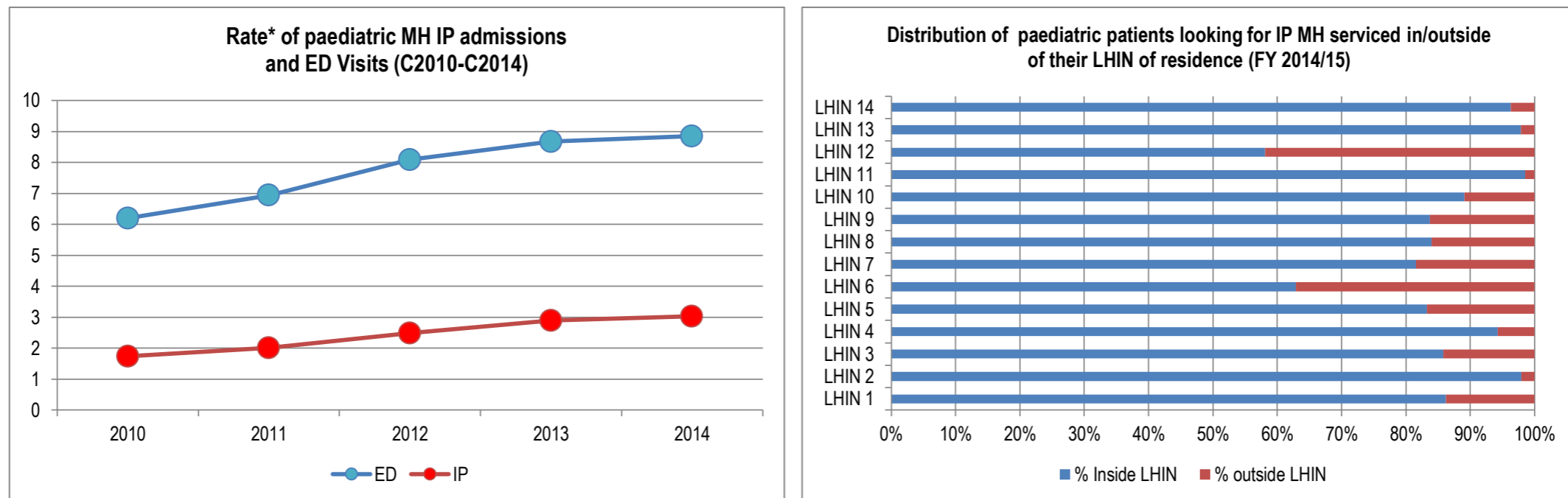
**Notes:**  
\*Rate per 1,000 paediatric patients

## 4.0 Paediatric Mental Health Indicators

### Comments

In FY 2014/15, there were 8,106 paediatric mental health inpatient discharges in Ontario. This represents a ~40% increase from 5 years ago. Of those, almost 20% (or 1 in 5 paediatric mental health inpatient discharges) were registered in LHIN 4. Of note, more than one third (38%) of paediatric patients in LHIN 6 were looking for inpatient mental service outside their residential LHIN. While the mental health inpatient volume has been growing steadily since 2010, the Average LOS continues to decline, from ALSO=10.1 in FY 2010/11 to ALSO=8.5 in FY 2014/15.

The rate of paediatric ED visits for mental health problems also continues to grow, with 8.8 / 1,000 population ED visits registered in FY 2014/15. The highest rate was observed in LHINs 13 and 14 (15 / 1,000 and 19 / 1,000 respectively). More than five and a half thousand mental health patients were admitted through ED. Of those, 20% case came from LHIN 4.



**Data Sources:**  
National Ambulatory Care Reporting System (NACRS) provided by the Canadian Institute of Health Information (CIHI).  
Discharge Abstract Database (DAD) provided by the Canadian Institute of Health Information (CIHI).  
IntelliHealth: Population estimates by LHIN (2009-2013), and Population projections by LHIN (2014-2015).

**Notes:**  
\*Rate per 1,000 paediatric patients

## 5.0 Obstetrics Indicators

### Comments

In FY 2014/15, there were 152,154 obstetrical inpatient discharges in Ontario. This represents a small decline (-1.5%) from 5 years ago. Of those, almost 40% of cases (58,280 cases) came from LHIN 7 (23,378 cases), LHIN 8 (18,949 cases) and LHIN 4 (14,480 cases).

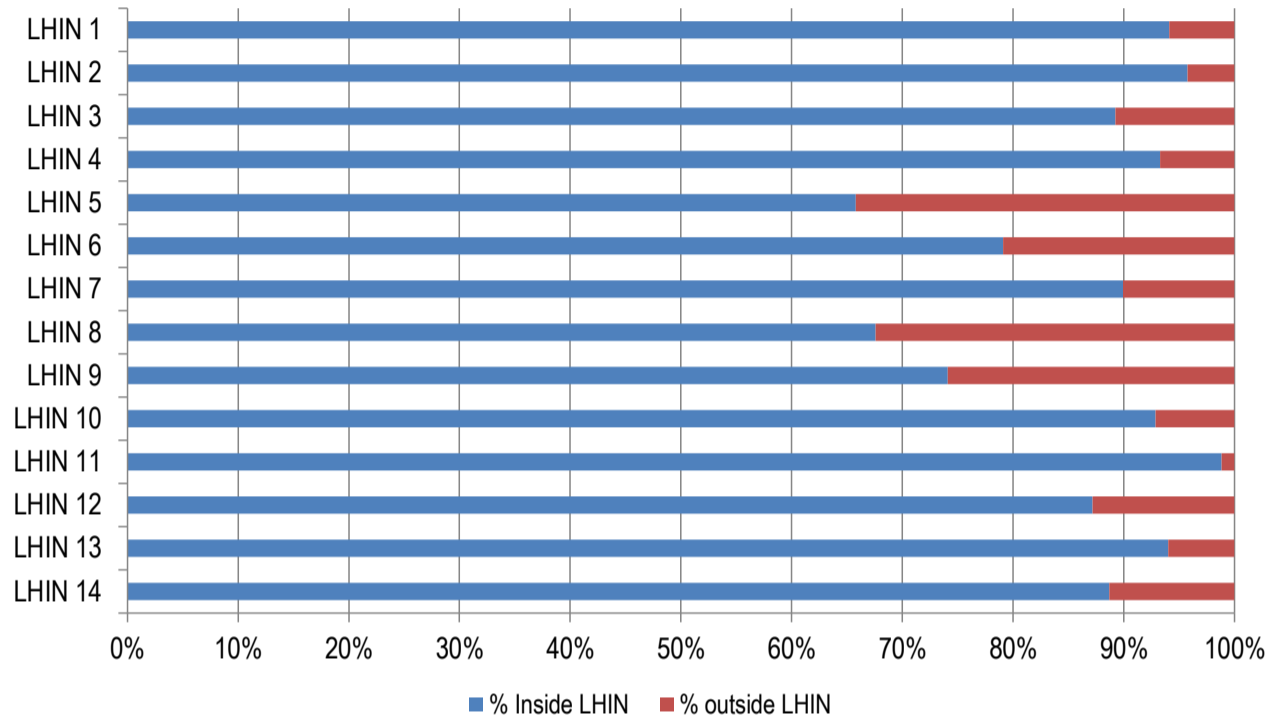
The Average LOS also decline slightly, from 2.3 in FY 2010/11 to 2.1 in FY 2014/15.

16% of obstetrical patients in Ontario were looking for inpatient services outside of their LHIN of residence. Of note, 1 in 3 obstetrical patients from LHIN 5 and LHIN 8 are looking for inpatient services outside of their LHIN of residence.

The overall rate of C-Sections among all low risk women in Ontario was 20.8%, with some variation across the province, ranging from 18.4% in the North West LHIN to 24.5% in the Central West LHIN.

79.9% of all Ontario low risk women had a 1st trimester visit. Some variation can be observed across the LHINs, with the lowest rate of 1st trimester visits occurring in the Central West LHIN (79.0%), and the highest rate occurring in the Mississauga Halton LHIN (96.3%).

Distribution of patients looking for IP OBS services in/outside of their LHIN of residence (FY 2014/15)



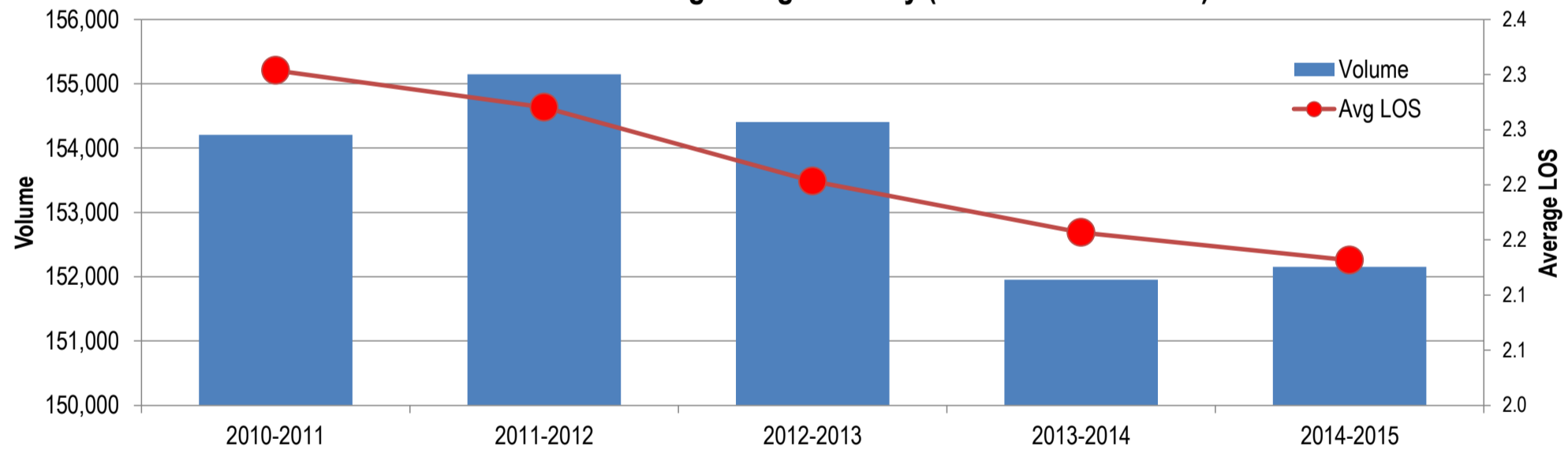
# 1 in 7

obstetrical patients in Ontario are looking for inpatient services outside of their LHIN of residence.

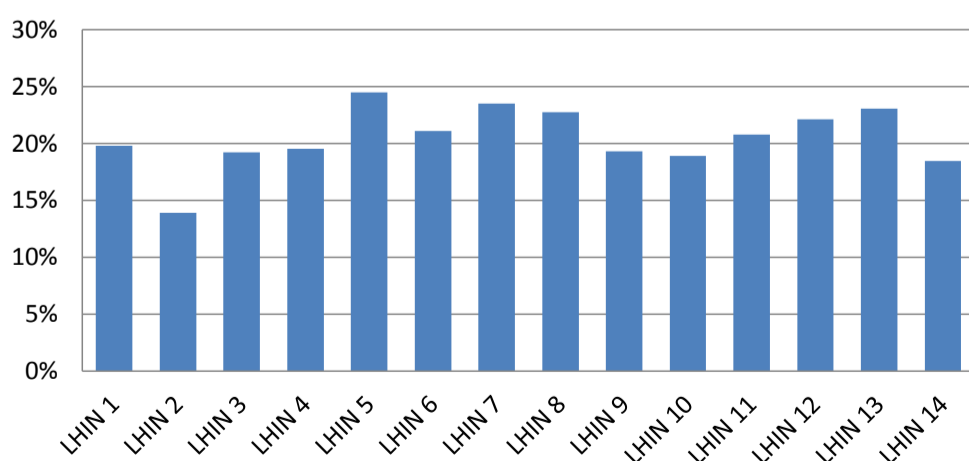
The Average Length of Stay for obstetrical patients in FY 2014/15 was

# 2.1

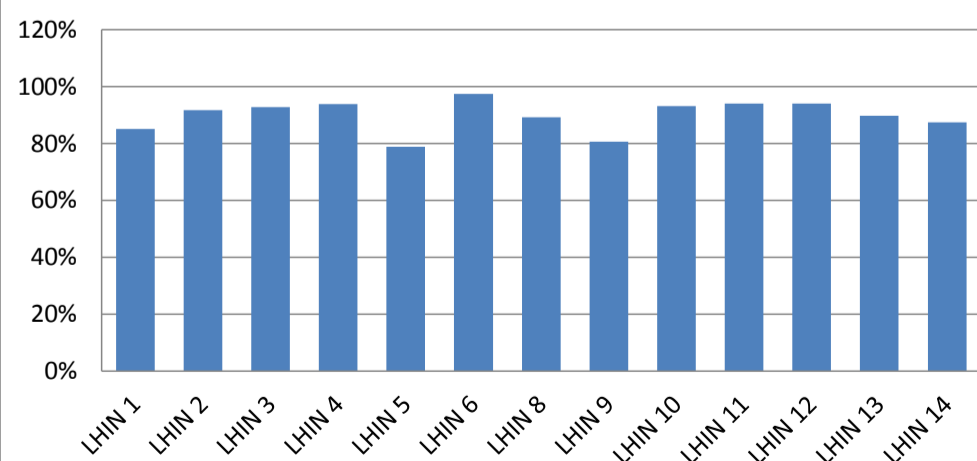
OBS IP volume and Average Length of Stay (FY 2010/11 - 2014/15)



Percent of Low Risk\* women who had a C-Section\*\* by LHIN\*\*\* (FY12/13 - FY13/14\*\*\*\*)



Percent of all women who had a 1st trimester visit by LHIN\*\*\*\*\* (FY 12/13 - FY 13/14)



### Data Sources:

DAD, provided by CIHI (2010-2015).  
BORN Ontario (2012-2014).  
IntelliHealth: Population estimates by LHIN (2009-2013), and  
Population projections by LHIN (2014-2015).

### Notes:

\* Complete definition of "Low Risk Women". is included in Section 1: Introduction.  
\*\* Includes emergency and elective C-section.  
\*\*\* LHIN of birthing hospital.  
\*\*\*\*All women who gave birth (including live birth and still birth) in Ontario from fiscal year 2012/13 to 2013/14 were included in this analysis.  
\*\*\*\*\* Toronto Central LHIN results are excluded due to missing data.