

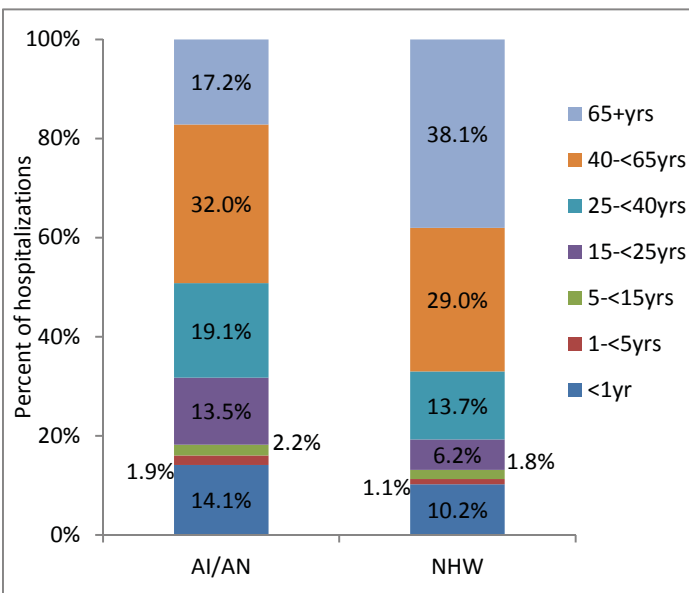


# HOSPITALIZATIONS AMONG AMERICAN INDIANS & ALASKA NATIVES IN OREGON, 2010-2011

## HOSPITAL DISCHARGE FACT SHEET SERIES (#1)

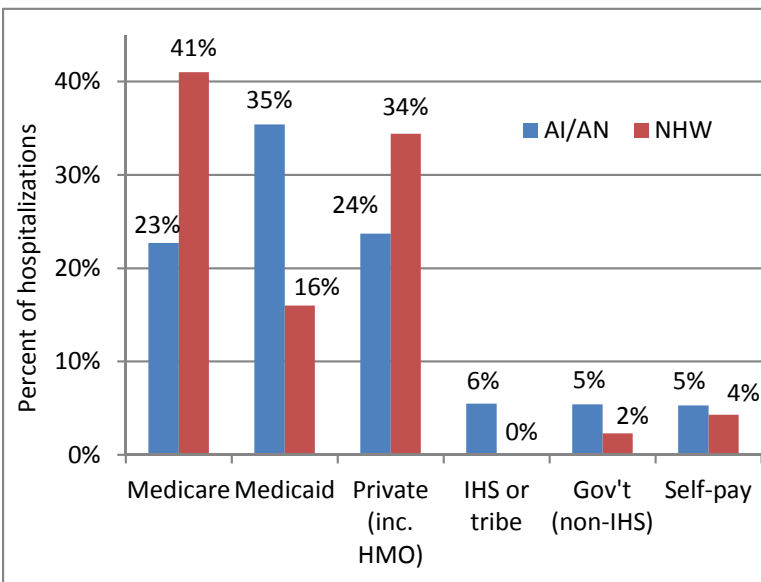
This fact sheet provides information on hospitalization characteristics, causes, and disparities among American Indians and Alaska Natives (AI/N) in Oregon. Hospital data are rich sources of information regarding health care access, use, and costs. The IDEA-NW Project is developing a series of fact sheets on hospitalizations among AI/AN in the state. This fact sheet is the first in a series for Oregon hospitals.

### AGE AT ADMISSION



- Among AI/AN hospitalizations, there were twice as many youths and young adults ages 15-25 years old compared with NHW hospitalizations in the same age range (13.5% vs. 6.2%).
- Among AI/AN hospitalizations, there were fewer elderly (65 years and older) compared with NHW hospitalizations in the same age range - this could be at least partly attributed to the disproportionately higher percentage of younger AI/AN patients.

### PRIMARY PAYER



- More AI/AN hospitalizations were paid for by Medicaid, IHS\* & non-IHS government sources, and self-pay.
- Fewer AI/AN hospitalizations were paid by Medicare or private insurance (including HMOs), compared with NHW.

*\*Note: Because IHS & tribally paid hospitalizations were expectedly higher among AI/AN than NHW, we did not include these in other payment source calculations.*



# LEADING CAUSES OF HOSPITALIZATION FOR AI/AN

The following describes the top principal diagnoses among AI/AN hospital patients, with comparisons to NHW hospital patients. Highlighted cells indicate a statistically significant difference (chi-square test,  $p < .05$ ).

## OVERALL

- In Oregon, male AI/AN patients had more hospitalizations for conditions of the perinatal period, diseases of the circulatory system, and diseases of the digestive system when compared with male NHW patients.
- Female AI/AN patients had more hospitalizations for complications of pregnancy, birth, and the puerperium, and conditions of the perinatal period, when compared with female NHW patients.

Rank: Males		AI/AN	NHW
All ages	1 Perinatal conditions	16.4%	11.4%
	2 Circulatory system	11.2%	17.6%
	3 Digestive system	11.1%	10.0%

Rank: Females		AI/AN	NHW
All ages	1 Pregnancy & birth	29.0%	18.5%
	2 Perinatal conditions	10.3%	7.8%
	3 Digestive system	8.9%	8.9%

## <1 YEAR OLD\*

Rank: Both sexes		AI/AN	NHW
<1 yr	1 Perinatal conditions	90.1%	92.0%
	2 Respiratory system	5.6%	2.9%
	3 Congenital anomalies	1.0%	1.2%

- AI/AN infants and babies under 1 year old had fewer hospitalizations for conditions of the perinatal period when compared to NHW infants.

## 1-<15 YEARS OLD\*

Rank: Both sexes		AI/AN	NHW
1-15 yrs	1 Respiratory system	25.7%	16.6%
	2 Digestive system	15.5%	12.9%
	3 Injury & poisoning	11.0%	15.1%

- AI/AN children patients ages 1 to under 15 years old had more hospitalizations for diseases of the respiratory system when compared with NHW patients of the same age range.
- AI/AN patients in this age range had fewer hospitalizations for injury & poisoning when compared with NHW patients. \*\*

## 15-<25 YEARS OLD

- Female AI/AN patients ages 15 to under 25 years old had more hospitalizations for complications of pregnancy, birth, and the puerperium when compared with female NHW patients of the same age range.
- Female AI/AN patients in this age range had fewer hospitalizations for mental illness when compared with female NHW patients.

Rank: Males		AI/AN	NHW
15-25 yrs	1 Injury & poisoning	22.3%	24.8%
	2 Mental illness	22.3%	19.5%
	3 Digestive system	15.7%	13.4%

Rank: Females		AI/AN	NHW
15-25 yrs	1 Pregnancy & birth	76.2%	67.2%
	2 Digestive system	4.4%	5.0%
	3 Mental illness	4.0%	6.5%

# LEADING CAUSES OF HOSPITALIZATION FOR AI/AN

## 25-<40 YEARS OLD

- Female AI/AN patients ages 25 to under 40 years old had fewer hospitalizations for complications of pregnancy, childbirth, and the puerperium when compared with female NHW patients of the same age range.

Rank: Males		AI/AN	NHW
25-40 yrs	1 Digestive system	18.3%	15.8%
	2 Mental illness	17.6%	17.2%
	3 Injury & poisoning	16.4%	18.2%

Rank: Females		AI/AN	NHW
25-40 yrs	1 Pregnancy & birth	61.2%	66.2%
	2 Genitourinary	5.6%	5.0%
	3 Digestive system	5.4%	5.0%

## 40-<65 YEARS OLD

- Male AI/AN patients ages 40 to under 65 years old had fewer hospitalizations for diseases of the circulatory system when compared with male NHW patients of the same age range.
- Male AI/AN patients in this age range had more hospitalizations for injury and poisoning when compared to male NHW patients.
- Female AI/AN patients ages 40 to under 65 had more hospitalizations for diseases of the digestive system when compared with female NHW patients of the same age range.
- Female AI/AN patients in this age range had fewer hospitalizations for diseases of the musculoskeletal system and connective tissue when compared with female NHW patients.

Rank: Males		AI/AN	NHW
40-65 yrs	1 Circulatory system	15.2%	18.9%
	2 Digestive system	13.7%	12.2%
	3 Injury & poisoning	13.2%	10.9%

Rank: Females		AI/AN	NHW
40-65 yrs	1 Digestive system	15.3%	12.7%
	2 Musculoskeletal	10.9%	12.8%
	3 Circulatory system	10.2%	10.4%

## 65 YEARS AND OLDER

- Diseases of the circulatory and respiratory systems were the leading causes of hospitalization among AI/AN patients ages 65 years and older in both genders.

Rank: Males		AI/AN	NHW
65+ yrs	1 Circulatory system	24.3%	26.5%
	2 Respiratory system	14.1%	12.8%
	3 Musculoskeletal	9.9%	10.7%

Rank: Females		AI/AN	NHW
65+ yrs	1 Circulatory system	22.2%	21.7%
	2 Respiratory system	13.2%	12.3%
	3 Digestive system	12.3%	10.7%

\* **Note:** The top principal diagnoses for AI/AN in the youngest age ranges did not differ by sex, and thus are presented together.

\*\* **Note:** Because other research suggests relatively high rates of injury and mortality among AI/AN <15 years of age, there may be other factors that help explain why these individuals were not hospitalized. See the IDEA-NW Project's NW AI/AN Mortality Report (2012), available on the project website, for more information.



## DISCHARGE STATUS

Discharge status	AI/AN	NHW
Routine	83.8%	75.9%
Skilled nursing facility	3.8%	8.0%
Other transfer	3.2%	3.1%
Home health care	6.4%	9.4%
Left against medical advice	1.4%	1.7%
Died in the hospital	1.5%	2.0%

- AI/AN patients were less often discharged to a skilled nursing facility, intermediate care, or home health care when compared with NHW patients.
- Fewer AI/AN hospitalizations ended with hospital deaths than NHW. This may be due to several reasons, including a younger age distribution among AI/AN hospitalizations, the causes for hospitalization, AI/AN having died before getting to the hospital, or choosing to not go to a hospital.

## DEFINITIONS

**AI/AN:** American Indian/Alaska Native

**IHS:** Indian Health Service

**Mean:** Average

**NHW:** Non-Hispanic White

**Principal diagnosis:** The condition considered to be the main reason for the hospitalization event

**Puerperium:** The period of time between childbirth and the uterus returning to its normal size

## DATA NOTES

- Data source: Oregon Association of Hospitals & Health Systems, 2010-2011; AI/AN race-corrected & compiled by the IDEA-NW Project.
- AI/AN are often misclassified as another race or are missing race data in hospital discharge databases, obscuring true estimates of health indicators. The IDEA-NW Project corrected misclassified AI/AN CHARS records through record linkage with the Northwest Tribal Registry. This fact sheet presents race-corrected data from the project.
- Total of 11,618 AI/AN and 529,222 NHW records.

## FOR MORE INFORMATION, CONTACT:

### The Improving Data & Enhancing Access - Northwest (IDEA-NW) Project:

- **Project E-mail:** [ideanw@npaih.org](mailto:ideanw@npaih.org)
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