# **CaCoon:** Medicaid Diagnosis Comparison between Children with Special Health Needs Who Did and Did Not Receive CaCoon Services

CaCoon is an Oregon public health nurse home visiting program for children and youth with special health needs (CYSHN\*) from birth to 21 years. CaCoon nurses provide comprehensive nurse assessments, interventions and care coordination to improve access to care and health outcomes.

#### Study

The study analyzed Medicaid claims and compared special health needs diagnosis of clients that did and did not receive CaCoon visits. The study included 1,198 Medicaid clients with CaCoon visits in

2009 and 122,082 Medicaid clients with no CaCoon visits. The study was limited to clients from birth up to 6 years old.

#### **Special Health Needs Diagnoses.**

Congenital, mental health, behavioral health, and developmental diagnosis codes defined special health needs diagnoses (SHN). The quantity and type of SHN varied significantly between CaCoon clients and Medicaid-Not CaCoon clients. Thirteen percent of CaCoon clients had no SHN diagnosis compared to 89 percent of Medicaid-Not CaCoon clients. Twenty seven percent of CaCoon clients had more than one SHN diagnosis compared to only 2% of Medicaid-Not CaCoon clients.

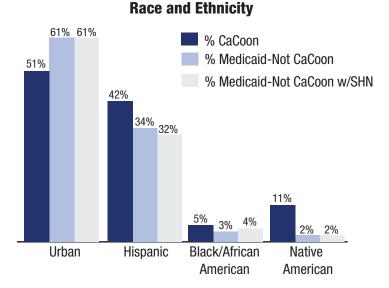
### Results

CaCoon clients had different demographic and medical risks compared to Medicaid-Not CaCoon clients. CaCoon served a significantly higher frequency of younger, male, rural, Hispanic, Black/African American, and Native American clients. CaCoon clients maintained steady enrollment in Medicaid with 93 percent enrolled for three or more years compared to only 29 percent of Medicaid clients with a SHN and 27 percent of Medicaid clients without a SHN.

## **Inpatient Hospitalization**

Inpatient hospitalization varied greatly between the groups. CaCoon clients were hospitalized nearly three times more than Medicaid-Not CaCoon clients with a SHN and nearly 10 times more than Medicaid-Not CaCoon clients without a SHN.

CaCoon served more demographically diverse at-risk and higher medical risk clients than Medicaid clients who did not receive CaCoon services.



Most Frequent SHN Diagnoses (Total Clients)				
CaCoon		MedicaidNot CaCoon		
Developmental Delay	17%	Asthma	4%	
Heart Conditions	13%	Heart Conditions	1%	
Hearing Loss	11%	Hearing Loss	1%	
Failure to Thrive	8%	Convulsion Conditions	1%	
Convulsion Conditions	6%	Kidney	1%	
Asthma	6%	Failure to Thrive	1%	
Brain Condition	6%	Attention Deficit Disorder	0.5%	

Most Frequent SHN Diagnoses (Clients with only one SHN)					
CaCoon		MedicaidNot CaCoon with SHN			
Developmental Delay	22%	Asthma	39%		
Heart Conditions	11%	Heart Conditions	12%		
Hearing Loss	9%	Hearing Loss	9%		
Asthma	6%	Kidney Conditions	5%		
Failure to Thrive	6%	Convulsion Conditions	4%		
Autism	5%	Failure to Thrive	4%		
Cleft Palate	4%	Other Congenital Condition	3%		

Note: A technical report provides detailed description of the research and analysis methods

OREGON HEALTH&SCIENCE UNIVERSITY

\*Children with special health care needs (CYSHN) have or are at increased risk for a chronic physical. developmental, behavioral, or emotional conditions and who also require health and related services of a type or amount beyond that required by children generally. For example, more inpatient and outpatient care, specialty provider care, prescriptions, speech and occupational therapy, and assistive devices.

