



The diagram illustrates the structure of Cook Children's Health Care System. At the top, three blue triangles point downwards towards a central green rectangular box. This box contains the text 'COOK CHILDREN'S HEALTH CARE SYSTEM'. Below this central box, there are four columns, each starting with a blue triangle pointing downwards towards a green rectangular box. Each of these four boxes contains a specific service area: 'MEDICAL CENTER', 'PHYSICIAN NETWORK', 'HOME HEALTH', and 'HEALTH PLAN'. Below each of these service area boxes is a list of statistics and services provided by that area. The entire diagram is set against a white background with a vertical green bar on the far left.

COOK CHILDREN'S HEALTH CARE SYSTEM

MEDICAL CENTER

311 Beds (+117)
87,000 ER Visits
2,100 Transports
12,000 Admissions
18,000 Surgeries

PHYSICIAN NETWORK

259 Physicians
163 Subspecialists
29 Specialties
35 Clinic Sites
450,000 PCP Visits
252,000 Spec Visits

HOME HEALTH

3800 Patients
•500 W Special Needs
192,000 Infusions
1000 Rehab Visits
4000 Skilled Visits
24,000 PD Hours

HEALTH PLAN

93,000 members
SCHIP & Medicaid
668,000 Office Visits
50,000 ED Visits
4900 Admissions
•2600 Deliveries
•368 NICU

Newest Vital Sign

http://www.pfizerhealthliteracy.com/pdf/FH_vitalsigns_040605.pdf

Nutrition Facts	
Serving Size	½ Cup
Servings per container	4
Amount per serving	Calories 250
	Fat Cal 120
	%DV
Total Fat 13 g	20%
Sat Fat 9 g	40%
Cholesterol 28 mg	12%
Sodium 55 mg	2%
Total Carbohydrate 30 g	12%
Dietary Fiber 2g Sugars 23 g	
Protein 4g	8%

Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs. **Ingredients:** Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milk fat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract

**CookChildren's**SM

Methods

1. NVS administered by nursing staff at the time of admission along with other standard admitting procedures.
2. 100% of staff trained to employ common communication strategies
 - a. "Teach Back"
 - b. "Show Back"
 - c. "Plain Language"
 - d. "AskMe3"
 - e. Medication Administration Program (*"Every Last Drop"*)
3. NVS failures assigned to a case manager for discharge teaching and follow up.

Screening Period (3/11/08-12/31/09)

2969 primary caregivers screened on admission (3192 adm)

- Refused=1%
- Not administered=6% (wrong language, missed opportunity, pass-through to regular inpatient unit)

32% of caregivers failed the screen (correct answers $\leq 3/6$)

- Commercial Failure Rate = 17%
- Medicaid/SCHIP Failure Rate = 52%
- Uninsured Failure Rate = 75% (small numbers)

Demographics

Trait	Cook Children's Health Plan (n=439)	All Government Health Plans (n=1659)	CHI Square
Failure Rate	52.1%	52.2%	ns
Age Group			
0 to Less than 1 year	24.3%	25.9%	ns
1-2 years	31.4%	47.3%	
3-5 years	19.2%	21.0%	
6-14 years	24.1%	18.8%	
15 years or older	1.1%	1.6%	
Sex	58.4% male	58.2% male	ns
Ethnicity			ns
Caucasian	30.5%	32.1%	
Hispanic	44.5%	41.5%	
African American	23.4%	25.0%	
Other	1.6%	1.3%	
Origin (Tarrant County)	87.5%	77.3%*	0.000

Diagnosis

Diagnosis Group	CCHP	Gov't	ns
Respiratory conditions including respiratory infections	55.2%	52.0%	
Neurologic conditions (e.g., headaches, convulsions)	10.7%	10.6%	
Gastrointestinal conditions including intestinal infections	9.1%	7.8%	
Trauma (fractures, concussion, burns, poisoning/overdose)	5.5%	9.5%	
Infections diseases (not included in other groups)	7.1%	7.6%	
Metabolic diseases or derangements (e.g., dehydration)	5.1%	4.5%	
Genito-urinary conditions (including infections)	2.4%	3.0%	
Complications of the newborn period (e.g., bilirubin, fever)	2.2%	3.4%	
Allergic conditions (other than asthma)	1.8%	0.9%	
Cardiology (heart diseases and complications)	0.2%	0.2%	
Hematology (blood and blood forming organs)	0.0%	0.1%	
Nephrology	0.0%	0.1%	
Unspecified	0.4%	0.3%	

Grouped for analysis due to small numbers

Results: Compliance

1. Explain the discharge diagnosis, and what it means for the child.
2. Recall the Lab values/tests and treatment the child received and their meaning.
3. List the discharge instructions and all necessary follow up plans (name & phone no. of PCP, appointments, follow up tests, prescriptions, etc.)
4. 185 families contacted 5-7 days after discharge:
 - a. 5% could not demonstrate understanding
 - b. 2% chose not to comply
 - c. 21% attempted but failed
 - d. 72% totally compliant

Results (CCHP): Cost & Utilization

PASS

	Mbrs	MM	Paid PMPM	Avg span
Pre All	208	2084	\$844	10.01
Post All	208	1818	\$308	8.74
	Visits	MM	Paid PMPM	Util PMPY
ED Pre	470	2084	\$305	2.7
ED Post	193	1818	\$75	1.3
PCP Pre	1250	2084	\$36	7.2
PCP Post	911	1818	\$29	6.0
Difference (SVGS)		Total	(\$829,008)	
		ED	(\$418,140)	

FAIL

	Mbrs	MM	Paid PMPM	Avg Span
Pre All	231	2464	\$605	10.67
Post All	231	2026	\$246	8.77
	Visits	MM	Paid PMPM	Util PMPY
ED Pre	519	2464	\$281	2.5
ED Post	267	2026	\$70	1.6
PCP Pre	1170	2464	\$29	5.7
PCP Post	902	2026	\$27	5.3
Difference (SVGS)		Total	(\$727,434)	
		ED	(\$427,486)	

Results: Changes in Patterns of Care

MEASURE	PASS	FAIL
ER Visits	0.0003	0.0016
ER Cost	0.0021	0.0136
PCP Visits	0.0938	0.0048
PCP Cost	0.0030	0.0481

Conclusions

1. Pre and Post enrollment periods similar between the 2 groups
 - a. PASS Pre Period=10.01 mo; Post Period=8.74 mo.
 - b. FAIL Pre Period=10.67 mo; Post Period=8.77 mo.
2. Both Groups had a significant improvement in patterns of care demonstrated by decreased ER visits accompanied by only a small change in PCP visits in the FAIL Group.
3. Mean reductions in health care costs (\$3545/patient) were also significant
 - a. Approximately ½ the savings appear to be due to decreased ER use
 - b. Same results for PASS and FAIL groups
4. Communication strategies (Teach Back, Plain Language) appear to achieve desired results in both groups (PASS, FAIL)
5. The additional CM intervention may have contributed to the favorable performance of the FAIL group

The Journey: Health Literacy Operations

1. **FY 2009:** Became part of the 5-year strategic plan (Patient Centered)
2. **FY 2010:** Subcommittee of the Health System Patient Safety Committee (Quality and Safety)
3. **FY 2010:** Year of Experimentation, Tools, and Training
 - a. **5PAV (3/11/08):** Continue current universal screening and communications strategies. Developed supporting programs for “Show Back” and medication administration compliance.
 - b. **CCHP (3/25/10):** AskMe3 emphasized in member communications in 2009. “Teach Back” incorporated into case management telephone contacts.
 - c. **NICU (5/01/10):** Universal literacy screening, communication strategies, & continue case management for high risk families
 - d. **PACU (TBD)** “Teach Back” incorporated into discharge planning for tonsil & adenoid cases for one surgeon’s patients
 - e. **Innovation Clinic (6/10):** AskMe3™, communication strategies for high risk patients who exhibit “red flags”
4. **FY 2011: Health Literacy Universal Precautions**
 - a. System-wide awareness campaign
 - b. Pushing to front line staff (handbook, competency training)