Fever Packet Distribution to Parents of Febrile Children and its Effect on Rates of Emergency Department Recidivism

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<u>Purpose</u>: To explore the effects of distributing "Fever Packets" to parents of febrile children on the rate of return visits to the Emergency Department.

Background: Return visits to the Emergency Department for children with uncomplicated febrile illness are a costly and often unnecessary use of resources. Providence St. Vincent instituted a Fever Packet program in 2006 which distributed packets containing a digital thermometer, dosing syringe, a bottle of liquid Acetaminophen, dosing guidelines for both Acetaminophen and Ibuprofen, and instructions in English and Spanish on how to treat simple fever in children in an effort to reduce the amount of these return visits.



Inspiration: A similar program was instituted by Presbyterian Hospital of Dallas, and the facility reported a significant reduction in the rate of unnecessary return visits for children with uncomplicated fever (Spader). The program achieved a significant reduction in the amount of return visits and a reported cost savings of over \$50,000 over the course of a 6 month period in 2004.

The Pediatric Care Committee at Providence St. Vincent Emergency Department developed their program in response in 2006.



Fever Kit Contents









Study Design: Retrospective analysis of children under age 5 with chief complaint or diagnosis of fever. Rates of return visits were examined for those children receiving a packet versus those who did not receive a packet. A return visit is defined as a return within 72 hours for symptoms consistent with the original visit.



<u>Results</u>: A total of 245 patients were enrolled in the study, 127 receiving the packets (51.8) and 118 not receiving a packet (48.2%).

The population not receiving a packet recorded a return rate of 9.3%, whereas the population receiving a packet recorded a return rate of 3.9%, less than half of the rate of those who did not receive a packet. Despite the difference in recidivism, statistical analysis did not show a significant difference between the two groups. Analysis is ongoing and may be more significant for the population under 24 months.







Chi Square Tests	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi- Square	2.906(b)	1	.088		
Continuity Correction (a)	2.091	1	.148		
Likelihood Ratio Fisher's Exact	2.958	1	.085		
Test				.120	.074
Linear-by-Linear Association	2.894	1	.089		
N of Valid Cases					
	245				



Bibliography/References

Spader, C. (September 24, 2006) *Take-Home Care - Hospital's Fever Kits Reduce Repeat Visits to the ED.* Retrieved from http://news.nurse.com/apps/pbcs.dll/article?AID=2006609240308

Image (dosing syringe). Accessed 2/20/2011. URL= http://www.angels4animals.com/10-cc-plastic-syringe.jpg

Image (digital thermometer). Accessed 2/20/2011. URL= http://www.surgicalindia.com/uploadedimages/987774.jpg

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