



Project to Improve Rates of Hematological Testing at Public Health Seattle- King County WIC Clinics

Yvette Fierce- Nutritional Sciences, School of Public Health, University of Washington, Seattle
Lynn Kidder- Site Supervisor, PHSKC WIC Nutritional Services



BACKGROUND

Prevalence of Iron Deficiency Anemia

- Prevalence in 1-2 year olds in US is approx. 7% *
- Prevalence in 1-2 year olds in WIC is approx. 8-9%
- Prevalence in women of child bearing age in US is 12%

Benefits of WIC Participation

- Supplemental Food Package has many iron rich foods
- Only iron-fortified formulas are available
- WIC requires hematological testing for all clients to screen for IDA

CDC, Recommendations to Prevent and Control Iron Deficiency in the United States, MMWR, April 3, 1998; 20-22

HEMATOLOGICAL TESTING



Documented Amounts of Hemoglobin and Hematocrit Testing in PHSKC Compared to Washington State

- Most WIC Clinics in WA State still perform tests on site
- PHSKC WIC has a policy of requesting tests from medical providers
- In WA WIC the amount of documented Hgb/ Hct testing is above 65%
- In PHSKC WIC the amount of documented Hgb/ Hct testing is 20%
- PHSKC designed this project to increase their percentage of documented tests

MATERIALS AND METHODS

Policy Review:
This project at Public Health Seattle-King County WIC Clinics included a review of current policies for screening children for iron deficiency and iron deficiency anemia (IDA). The hematological testing policies reviewed included those from the Center for Disease Control and Prevention, the American Association of Pediatrics, the Institute of Medicine, the Federal WIC program, the Washington State WIC program and then the Public Health Seattle King County WIC program.

Staff Survey and Chart Review:
A survey of WIC staff working with clients on a daily basis was performed to identify other barriers to obtaining hematological test results. The current staff felt that the largest barrier was getting the results back from the doctor. A small chart review of current clients was performed to validate the results of the survey. The results of the chart review (shown below) indicate that more request forms need to be given to the clients because percentage of documented hematological testing closely matches the number of forms given out.

PHSKC WIC CHART REVIEW SUMMARY	Total	% of totals
Number of client charts reviewed	185	
# forms given (documented in chart)	102	55.1
# recorded Hgb or Hct (documented in chart)	81	43.8

Create Screening Tools:
A new high risk screening tool was created for clients in order to better capture those clients who are at highest risk of low iron. Two sheets were created to emphasize the different risks for infants 6-12 months and children 1-5 years.

LOW IRON SCREENING SHEETS

Public Health Seattle and King County WIC Program

Infants 6-12 Months

Questions about your child and iron

YES or NO	My baby looks very pale or has low birth weight.	Please circle YES or NO
YES or NO	I give my baby iron supplements or iron-rich formula.	
YES or NO	My baby and I follow a vegetarian diet.	Please circle YES or NO
YES or NO	I do not give my baby any iron fortified baby cereal or baby food.	
YES or NO	My doctor told me that my child has low iron or is anemic.	

When you are finished, please give this to the WIC staff you are here to see today.

Public Health Seattle & King County

Public Health Seattle and King County WIC Program

Children 1-5 years

A few questions about your child and iron

YES or NO	My child has a medical problem.	Please circle YES or NO
YES or NO	My child drinks more than four glasses of milk everyday.	
YES or NO	My child does not eat meat or beans.	Please circle YES or NO
YES or NO	I give my child a vitamin with iron.	
YES or NO	My doctor told me that my child has low iron or is anemic.	
YES or NO	My child likes to share on our wall or dirt, paint or other non-food stuff.	

When you are finished, please give this to the WIC staff you are here to see today.

Public Health Seattle & King County

DISCUSSION

Policy Review

- Pediatricians are reluctant to perform hematological tests in addition to those outlined in the AAP guidelines

Staff Survey and Chart Review

- Staff feel that the forms are not returned from Drs
- Staff document giving forms to only 55% of clients
- Of those given the form, 44% have testing data in charts
- Need to give more forms to increase documented tests

Low Iron Screening Sheets

- Created to determine if the child and mom are at high risk for iron deficiency and should be scheduled to see the WIC registered dietician and have hematological testing performed to assess iron status.
- Need to be pilot tested and evaluated for accuracy of screening for iron deficiency anemia

