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Partners in Health Lead Screening Project

Marilyn J. Lotas, PhD, RN, FAAN

School of Nursing, Case Western Reserve University, Cleveland, OH, USA

Mary T. Quinn Griffin, PhD, MSN, M.Ed., RN, FAAN, ANEF

School of nursing, Frances Payne Bolton School of Nursing at Case Western Reserve University, CLEVELAND, OH, USA

Purpose: The purposes of this project are:

1. To increase the percentage of Cleveland's children, ages 3-6, who are screened for blood lead levels (BLLs) from the current 30% to a minimum of 80%.

Contributing Factors: Cleveland ranks 1st in child poverty, 3rd in the percentage of children who are found to have toxic levels of lead and 90% of its housing stock was built before 1978 when lead paint was banned in the U.S.

2. To provide comprehensive follow up for all families of children with BLLs. 100% of these families will receive information, education, advocacy and referrals for medical care, legal support if necessary and support for the remediation of lead contaminated housing.

3. By year 3 of the project children in all 65 Cleveland Schools will be screened each year between the ages of 3-6 and we will begin to expand to charter schools, religious schools, and Head Starts.

4. By year 4 the program will be institutionalized as a formal part of the health program in the Cleveland Schools.

Methods: The first step in this project, led by the Frances Payne Bolton School of Nursing was to form a coalition that included the Cleveland Metropolitan School District, The Cleveland Department of Public Health, the MetroHealth School Health Program, and the Office of the Mayor. This was done with the recognition that this issue could be addressed only with the full participation of a broad city wide coalition.

The second step was to identify and train a workforce to do the work of screening and follow-up. We are using health professional students as the workforce. These are students who need community based health care experience and who are sufficiently advanced in their clinical work to be qualified to provide the services needed. We are including junior and senior nursing students from two programs, Physician's Assistant students and expect to add two more schools of nursing and the University medical students as we progress.

The third step was to schedule the schools for screening and to begin the process of obtaining parental informed consent. Since there is no mandate for lead screening in Ohio, we must have a consent form signed for each child we screen. To obtain informed consent we attend school open houses, community events and parent teacher conferences, automatic telephone calls from the schools to parents, information sent home in backpacks and personal calls to parents.

The fourth step is to implement the screenings. Inter-professional teams of health professional students with their faculty take the equipment and set up a clinic in the school to complete the screenings.

The fifth step is to contact parents whose children have elevated BLLs to arrange for follow up. Community members and health professional students are trained together and form 2-3 person teams to work with each family.

Results:

1. 14 schools have been screened to date.

2. By holding at least two screenings for each school we are able to achieve the goal of at least 80% of eligible children screened.

3. The percentage of children found to have elevated BLLs has varied by school.

Complete data from our 1st four schools are as follows

1. 95% of eligible children screened, 16% were found to have elevated BLLs and were referred for follow up

2. 82% of eligible children screened, 0% were found to have elevated BLLs.

3. 83% of eligible children screened, 11% were found to have elevated BLLs.

4. 75% of eligible children screened with 8 children consented and ready to screen and 11% were found to have elevated BLLs.

Conclusions: Cleveland's children at a high risk for toxic BLLs. The overall percentage of children with elevated lead levels in 2016 (the last year for which we have complete data) was 12% with some neighborhoods as high as 26%. We have developed a student workforce well qualified to do the work required. We are partnered with key members of the community to support this endeavor and we are developing strong community support. The project will screen up to 50% of the 65 CMSD schools this academic year. This project truly represents a city coming together to help our children.

Title:

Partners in Health Lead Screening Project

Keywords:

community collaborations, community members as active participants and lead poisoning in children

References:

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Abstract Summary:

This project, led by the Frances Payne Bolton School represents a broad city collaboration to address Cleveland's lead problem. Cleveland is 1st in child poverty and 3rd in rates of childhood lead poisoning. The project screens children 3-6 years of age and provides follow-up with education, advocacy and referrals.

Content Outline:**I. Purpose:**

A. To provide a comprehensive lead screening program for 3-6 year old children beginning with the

Cleveland Metropolitan School District (CMSD) with a goal of screening at least 80% of the

CMSD eligible children in each school.

B. To provide comprehensive follow-up for all families of children found to have elevated blood lead

levels (blls), including education, advocacy, and referrals for healthcare, legal support and

housing support.

II. Describe the partnership

A. Collaboration of nursing, city health department, city schools, MetroHealth School Health

Program and the Office of the Mayor.

B. Strong community involvement

III. Review results to date.

A. Review the numbers and percentage screened by school

B. Present number and percentage of blls/ identified by schools

IV. Describe the follow up process

A. Formation of Navigation Teams to follow families

B. Involvement of community members.

V. Conclusions

A. Lessons Learned

B. Next Steps

First Primary Presenting Author***Primary Presenting Author***

Marilyn J. Lotas, PhD, RN, FAAN

Case Western Reserve University

School of Nursing

Associate Professor

Cleveland OH

USA

Author Summary: Dr. Lotas participated in this study as a committee member. She will not be presenting at the conference. Dr. Lotas has over three decades of nursing

research. She has published research in nursing education, behaviors and nursing curriculum.

Second Secondary Presenting Author

Corresponding Secondary Presenting Author

Mary T. Quinn Griffin, PhD, MSN, M.Ed., RN, FAAN, ANEF

Frances Payne Bolton School of Nursing at Case Western Reserve University

School of nursing

Professor

CLEVELAND OH

USA

Author Summary: Genetics Cardiac Care Chronic Diseases Across the Lifespan Women's Health Program Evaluation Masters, Educational Management, Dublin University, Trinity College, Dublin Diploma, Advanced Statistics, Dublin University, Trinity College, Dublin MSN, Nursing, Case Western Reserve University, Frances Payne Bolton.