

PROJECT BRIEF

Pilot Study to Implement a Coumadin/Warfarin Dosing Calculator

Background

Coumadin is a commonly used drug that prevents blood clotting. However, there is a high rate of side effects for patients on Coumadin. An individual's ideal Coumadin dose varies based on his or her personal characteristics. Some of this variability may be attributed to an individual's genetic makeup. Marshfield Clinic Research Foundation has previously developed a dosing model that explains about 56% of the dose variability. The dosing calculator has yet to be implemented in real time. Testing the new methods in real time will help determine the feasibility of using the dosing calculator to administer Coumadin to patients who are newly diagnosed with conditions requiring Coumadin therapy.

Goals

- Learn how to perform genetic testing and determine dosing recommendations before initiation of Coumadin therapy
- Use data collected to further educate physicians with the aim of maximizing participation in further studies of Coumadin dosing
- Learn how to perform genotype analysis in real time

Timeline

February 2007 – January 2009

Population Served

Patients who are newly diagnosed with a condition that requires Coumadin therapy.

Study Sponsors

The *Wisconsin Network for Health Research (WiNHR)* is sponsoring the study. WiNHR is a network of researchers interested in improving the health of Wisconsin through research.

Study Sponsors, cont...

Third Wave Technologies, a DNA diagnostics company, is partnering with the project to supply the equipment needed to conduct the study.

Partners

Center for Urban Population Health/Aurora Health Care

*University of Wisconsin Hospitals and Clinics
Gundersen Lutheran Medical Foundation
Marshfield Clinic Research Foundation*

Local Investigators & Staff

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The Center for Urban Population Health is a partnership among the University of Wisconsin School of Medicine and Public Health, the University of Wisconsin-Milwaukee, and Aurora Health Care, Inc. Our mission is advancing population health research and education to improve the health of urban communities.