



# Case Study

## 70% Improvement in Patient Understanding of Medication

### The Opportunity

A large metropolitan hospital identified warfarin (Coumadin®) as a drug consistently leading the hospital's adverse drug reaction list. Many of these incidents led to the readmission of patients to the hospital. Warfarin is a very effective, yet potentially dangerous medication. It is generally used to treat patients with blood clots, or to prevent blood clots from forming in high risk patients. One of the more serious side effects of warfarin is increased risk of bleeding. This bleeding can be as mild as a minor bruise, or as life-threatening as a severe hemorrhage. Due to these critical issues, it was absolutely necessary for patients to understand basic and vital information about their warfarin medication. Therefore, warfarin was identified as a "target medication" for patient discharge counseling.

### The Approach

To address warfarin education and other significant quality issues relating to patient care, the hospital contacted QualPro for assistance. The interdisciplinary group selected to improve warfarin patient education included members from nursing, pharmacy, nutrition, and cardiology. A QualPro consultant served as an advisor.

### The Test

Using QualPro's 12-Step MVT Process®, the hospital established a measurement system and a patient survey to measure information retention. The project participants brainstormed ideas to improve patient education and decided on seven ideas that were quick, easy, and inexpensive to implement.

<i>Idea</i>	<i>Old</i>	<i>New</i>
Written Information Provided	No	Yes
Educator	Nursing staff	Pharmacy staff
Patient Must Verbalize Understanding	No	Yes
Change Education If Patient Has Warfarin Prior History	No change	Adjust to patient educational level
Provide Nursing Service Phone Number	No	Yes
Video Teaching Provided	No	Yes
Educate Family Members	No	Yes

### The Results

Patient information retention was improved when:

- A nurse provided the education
- The patient verbalized understanding
- Written information was provided

The initial survey instrument was used again to measure the effect of the tests. The higher the percentage of "yes" survey answers, the higher the patient information retention. Information retention increased 20% while patients' acknowledgement of receiving in-depth information jumped 70%. By understanding their medication better, patients lessen the risk of a severe reaction from improper medication.