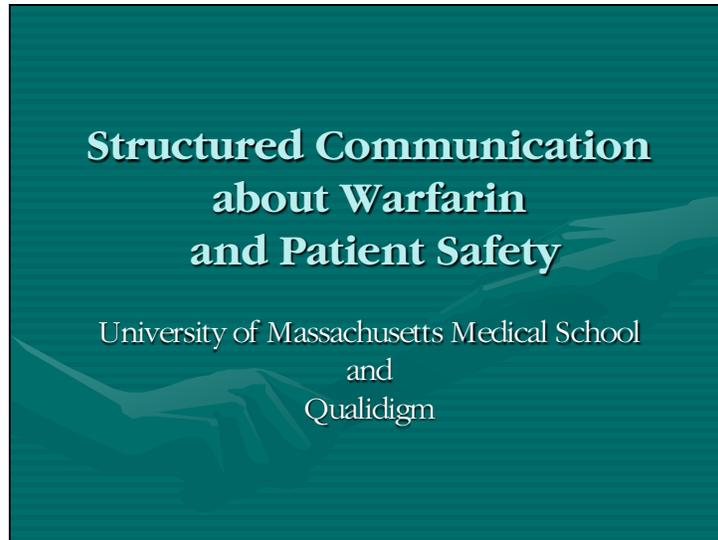


Slide 1



Welcome! This program is designed to introduce you to a method for communicating effectively around the management of warfarin for nursing home residents.

Components of the Presentation

- A quick primer on the blood thinner warfarin
- Adverse events – most commonly bleeding – among nursing home residents taking warfarin
- Communication problems as an underlying cause of adverse events
- A new approach called SBAR for organizing communication about warfarin between nurses and physicians
- An accompanying presentation that describes assertive communication techniques

The presentation includes:

- a quick primer on the blood thinner warfarin,
- a summary of a study of the errors that lead to adverse events—most commonly bleeds—among nursing home residents taking warfarin
- a description of communication problems related to adverse events for nursing home residents, and
- an introduction to a new approach called SBAR for organizing communication about warfarin.

There is an accompanying presentation that describes assertive communication techniques.

Warfarin (A.K.A. Coumadin)

- Very commonly used drug in nursing homes



- Goal of warfarin therapy: thin blood so it will not clot



Warfarin, also known as Coumadin®, is a commonly used drug in older patients, especially those who reside in nursing homes. Warfarin is an anticoagulant, meaning that it is a “blood thinner” that prevents blood from clotting.

Slide 4



Warfarin, also known as Coumadin®, is a commonly used drug in older patients, especially those who reside in nursing homes. Warfarin is an anticoagulant, meaning that it is a “blood thinner” that prevents blood from clotting.



In 1924, a veterinarian reported a new bleeding disorder in cattle. It turned out that the cows affected had been fed spoiled sweetclover. This bleeding disease was eventually linked to the presence of an anticoagulant, or blood thinner, in the spoiled sweetclover.

In 1948, this anticoagulant was manufactured and marketed as a potent rat poison. It was called warfarin. Use of warfarin as a blood thinner in humans was considered, but there were widespread concerns about toxic effects.

In 1951, a young Army recruit attempted suicide by ingesting massive doses of rat poison, but he survived. His survival reassured the medical community about the safety of warfarin, and physicians began to use this drug as a blood thinner for patients with thromboembolic disorders like deep venous thrombosis (or DVT), pulmonary embolus (or PE), and atrial fibrillation.

Principal Reasons for Warfarin Therapy

- Atrial fibrillation
 - stroke prevention
- Venous thromboembolism treatment and prevention
 - Deep venous thrombosis (DVT)
 - Pulmonary embolism (PE)
- Mechanical heart valves
 - stroke prevention

Patients take warfarin for various reasons. The most common reasons include the ones listed here:

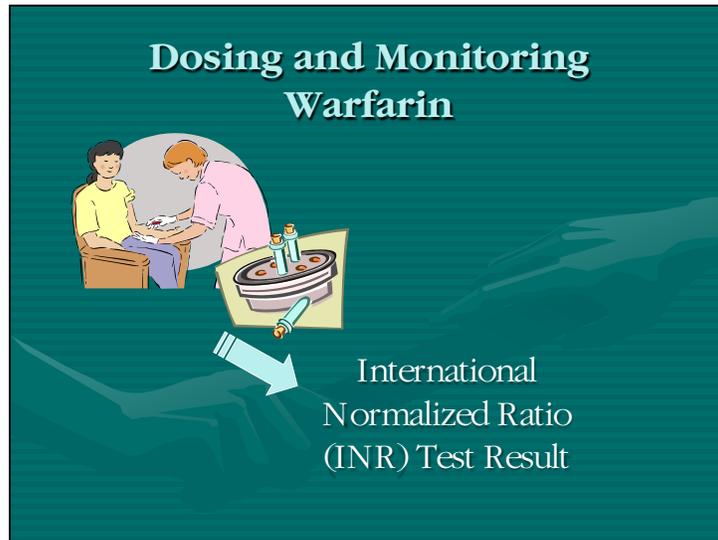
- Atrial fibrillation is an abnormal heart rhythm that can lead to the formation of blood clots in the heart that travel to the brain and cause strokes.
- Deep venous thrombosis (DVT) occurs when blood clots form in the veins of the legs. These clots can then travel to the lungs leading to a life-threatening condition called pulmonary embolism or PE.
- Some patients receive warfarin because they have a mechanical heart valve. Mechanical heart valves (as opposed to tissue valves from pigs or cattle) are prone to clotting—leading to a life-threatening situation.



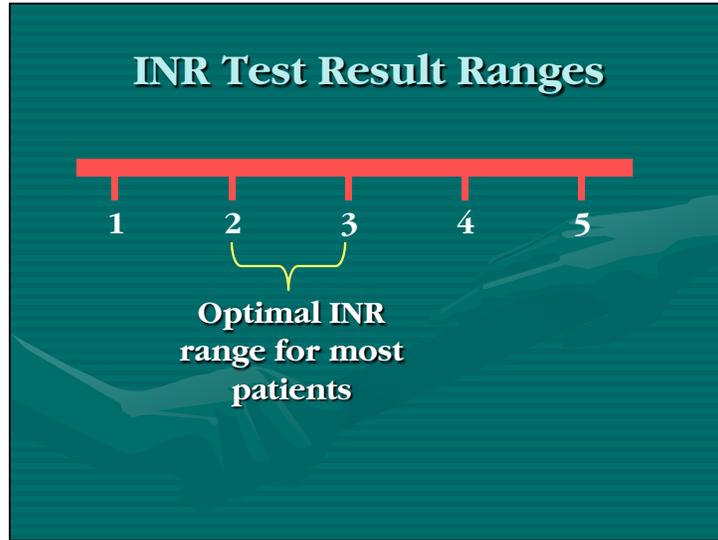
Warfarin Safety

- Risk of serious bleeding
- Especially true of residents in nursing homes
- Dose and monitor *extremely* carefully

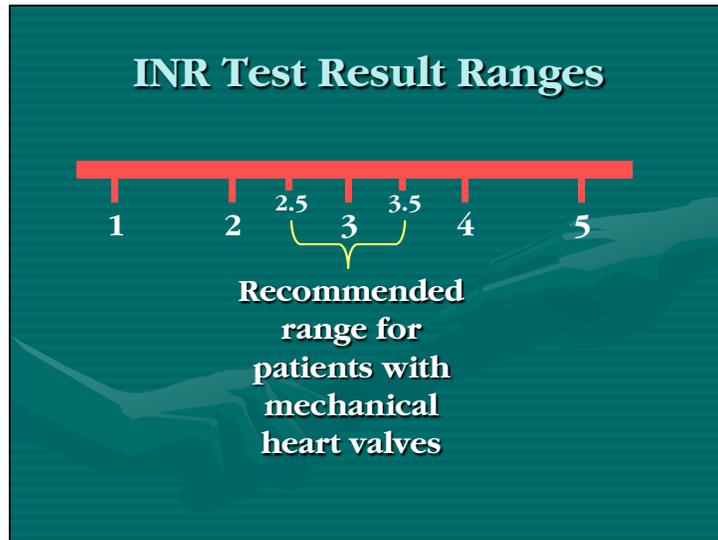
Because warfarin is a blood thinner, the risk of serious bleeding is increased with its use. This is especially true in residents of nursing homes on warfarin. For that reason, warfarin needs to be dosed and monitored extremely carefully.



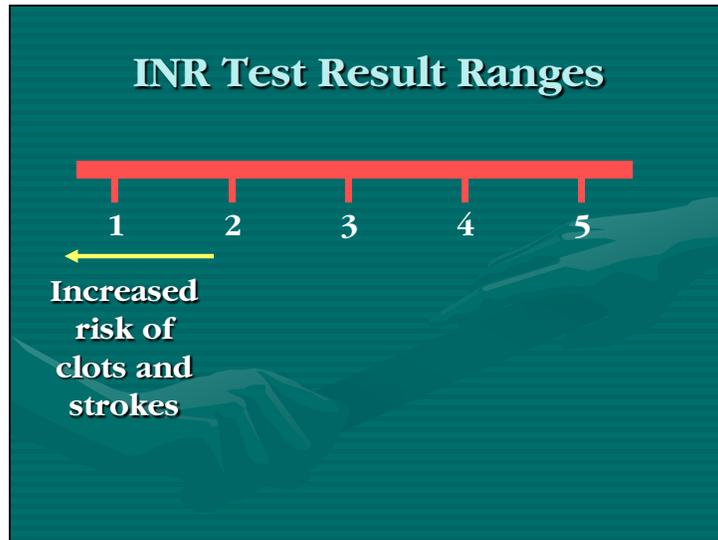
Warfarin is monitored by drawing a blood sample and determining the INR [international normalized ratio]. The INR is a measure of how thin the patient's blood is. The INR is the **KEY** test result that health-care providers use to monitor warfarin therapy. Doctors no longer rely on the PT level [prothrombin test] test to make decisions about warfarin dosing and monitoring.



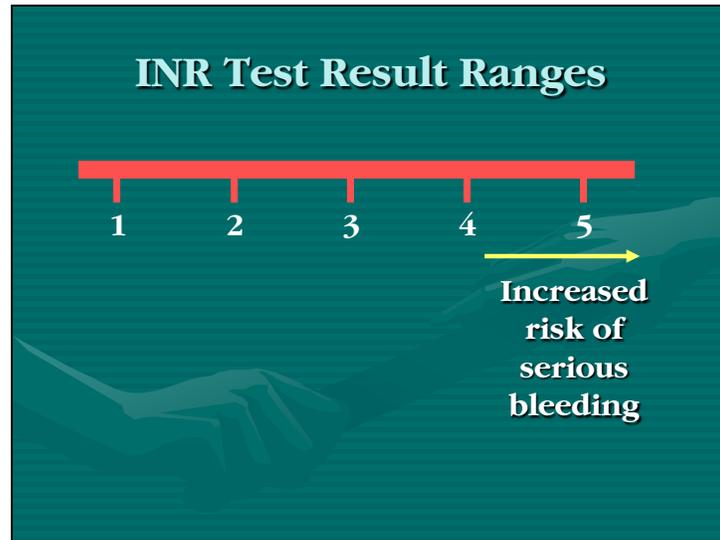
The optimal INR range for most indications for warfarin therapy is 2 to 3.



However, for patients with mechanical heart valves, the recommended INR range is 2.5 to 3.5.



When the INR is below 2, the patient may not be optimally protected against blood clots and strokes.



However, when the INR exceeds 4, the risk of serious bleeding increases dramatically.

Medications that Interact with Warfarin



- **Antibiotics + warfarin** ➔ high INR levels
Increase frequency of INR tests
- **Bactrim** (trimethoprim/sulfamethoxazole or cotrimoxazole) + **warfarin** ➔ dangerous levels
Avoid using with warfarin!

Many drugs interact with warfarin. The most common drugs that interact with warfarin are antibiotics. Antibiotics usually raise the INR level and place patients at risk for bleeding. For that reason, the use of any new antibiotic should lead to an increase in the frequency of INR monitoring. The antibiotic Bactrim® can cause dangerous elevations in the INR and should always be avoided in patients receiving warfarin.

Medications that Interact with Warfarin



- **NSAIDs + warfarin** → Increased risk of bleeding
- **Examples**
 - ibuprofen (Motrin)
 - naproxen (Naproxyn)
 - celecoxib (Celebrex)

Other drugs that can increase the risk of bleeding with warfarin include all of the NSAIDS [nonsteroidal antiinflammatory drugs]. These are drugs like ibuprofen, naproxen, and celecoxib.

Medications that Interact with Warfarin



- **Aspirin and Plavix (Clopidogrel) + warfarin** →
Increased risk of bleeding
Monitor closely!

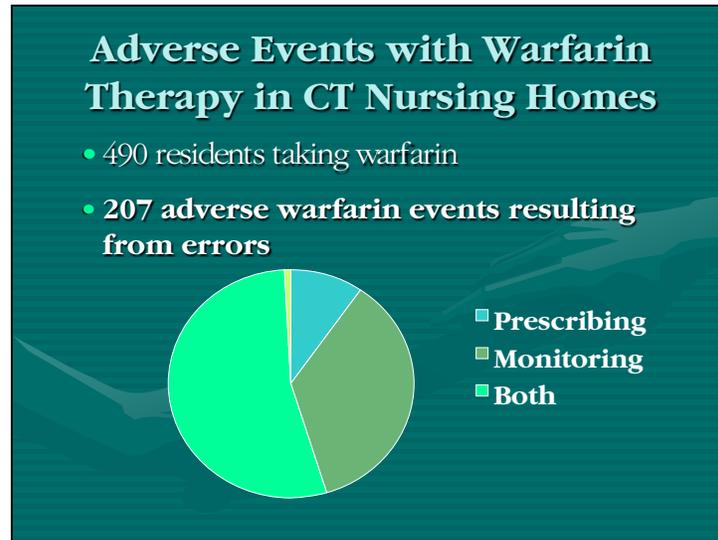
Other drugs that can increase the risk of bleeding with warfarin include all of the NSAIDS [nonsteroidal antiinflammatory drugs]. These are drugs like ibuprofen, naproxen, and celecoxib.



Here's one of the cases we found in a study of nursing home residents. A 93-year-old woman had been on warfarin therapy for a number of years due to a history of atrial fibrillation and prior stroke. She had been having urinary frequency and pain, and the results of her urinalysis came back abnormal. The nurse called her physician, but couldn't reach her and left a request for a callback.

Later that day, the nurse received a callback from a covering physician who prescribed Bactrim, a drug that interacts dangerously with warfarin. The covering doctor did not realize that the patient was taking warfarin. Four days later, the patient got a nosebleed that was very difficult to stop. Her regular physician had returned from his vacation and ordered an immediate INR test. It turned out that the INR was dangerously elevated. Fortunately, her condition was caught before any further bleeds occurred.

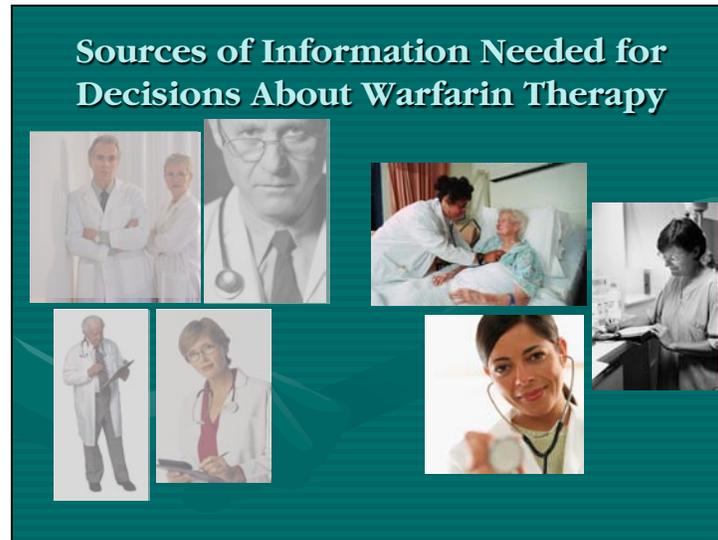
How often do accidents like these happen?



To assess the possibility that there are problems in the management of warfarin among nursing home residents, we followed 490 residents taking warfarin in 25 nursing homes across Connecticut. We identified 207 adverse events (mostly bleeds) among these residents that were associated with errors in managing warfarin. Almost all of these errors occurred during prescribing and monitoring of warfarin. It was clear that communication failures were the underlying cause of many of these errors.



When we reviewed these cases, we found a pattern. Usually, physicians were making decisions about warfarin therapy during brief telephone calls from nurses at the nursing homes, without the patients or their medical records in front of them. The doctors simply did not appear to have all the information required to make the best decisions.

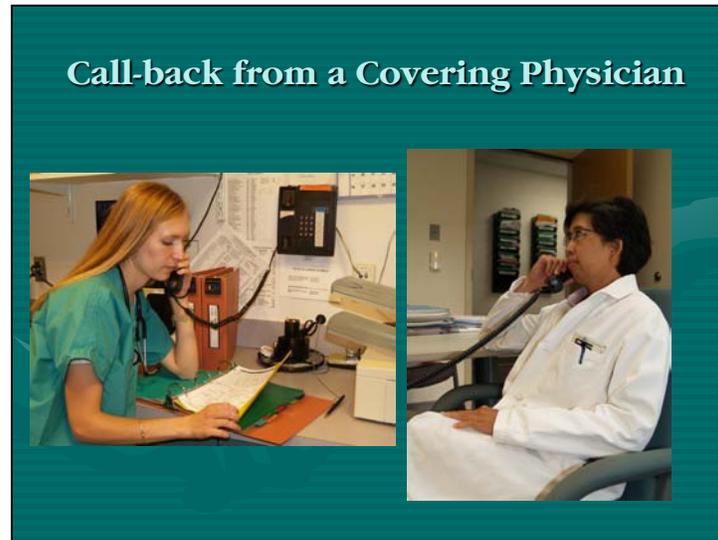


It was clear that more complete communication between nurses and physicians would be a critical element in reducing the high rate of adverse events among residents on warfarin. The nurses who were dealing with the nursing home residents on a day-to-day basis had access to the information the physicians needed — they had access to the INR results, medication administration records, and nursing notes. However, telephone communication between nurses and physicians can be problematic.

The Disconnect in Nurse-Physician Communication Styles

- Nurses are trained to be narrative and descriptive.
- Physicians are trained to cut to the chase – “What do you want me to do?”
- The result – frustration on both ends.

Observers of communication between nurses and physicians in many health-care settings have found some fundamental differences in the way that these two types of clinicians communicate. Nurses are trained to speak and think in narratives and descriptions. Physicians, on the other hand, often want to “cut to the chase.” They are not patient with lengthy narratives; they want complete information, but they want it efficiently. As a result, both parties become frustrated, important information is not conveyed, and patient safety may suffer.



Narrator: Let's listen to an example of a telephone callback from a physician about a nursing home resident.

[Telephone ringing.]

Nurse: Hello, 2 East, this is Ann Marie.

Doctor: This is Dr. Kastle, returning your call.

Nurse: Aah, Dr. Kastle, are you covering for Dr. Jones?

Doctor: Yeah, I'm covering.

Nurse: Okay, let me see here, uh, I'm calling about Mrs. Moynahan. Do you know her at all?

Doctor: No, I don't know her at all.

Nurse: All right, I'm calling you because I just got a call from the lab. Her INR came back at 4.1, so I just wanted to let you know and see what you want to do with that.

Doctor: Do you always get the INRs back so late?

Nurse: You know how labs work, I mean, they just call me with the results whenever; but I know it's important, so I wanted to give you a call right away.

Doctor: Okay, so can you tell me what her last INR was and the dosage of warfarin she has been on?

Nurse: Yeah, hold on, I have to get her chart. Can you hold for a moment please?
[Several seconds elapse. The doctor hears music playing while on hold.]

Nurse: All right, one second now, I got her chart. Now, what did you need to know?

Doctor: I need to know her last INR and the doses of warfarin that she's been on.

Nurse: Okay, let me find the lab section. [Shuffling of papers in the background.] Okay, so she's, yep, today she's 4.1, looks like she had an INR on the 16th and it was 2.7.

Doctor: Were there any changes in her warfarin dose between then and now?

Nurse: Hold on, let me get to the orders part of the chart. [Shuffling of papers in the background.] No, it looks like she has been on 5 mg since the 16th.

Doctor: And are you sure there's nothing else, no new medications or anything?

Nurse: I don't know. Gosh, she has got a lot of orders here. No, you know, I have been off for the past couple of weeks, I have been on vacation. Let me go through here and see. Yep, yep, she did have, okay, yeah, she's got a UTI [urinary tract infections]. They started her on Bactrim, let's see, on the 27th.

Doctor: So...

Nurse: That was 3 days ago.

Doctor: So, the Bactrim is probably interacting with the warfarin and it is probably increasing her INR and that is why it is high now.

Nurse: Oh yeah, that's right, I forgot that happens sometimes.

Doctor: Let's hold her warfarin tonight and get an INR tomorrow. Let her physician know the results and ask him for the next dose of warfarin.

Nurse: Okay, so hold the warfarin tonight, and...

Doctor: Get an INR tomorrow.

Nurse: Yes, an INR tomorrow in the a.m. and call her physician with the results.

Doctor: Right. And, how long has she been on Bactrim?

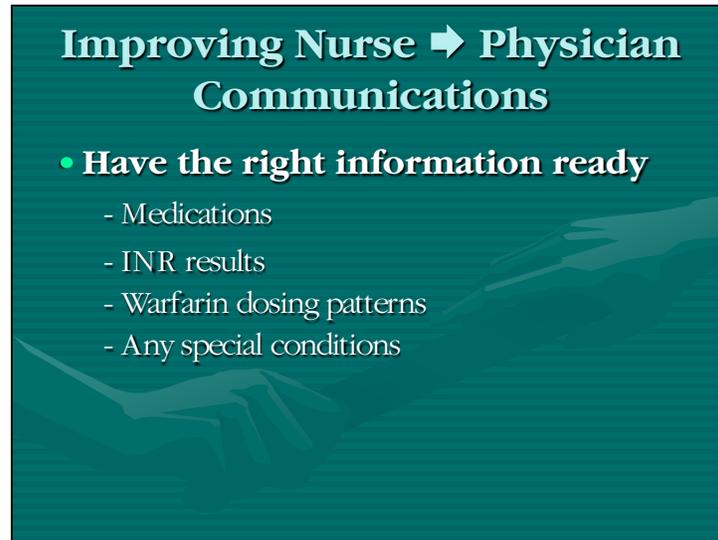
Nurse: Um, looks like 3 days.

Doctor: Okay, so we better stop the Bactrim too at this point and let her physician know.

Nurse: Okay.

Doctor: Thanks.

Nurse: Right.



Improving Nurse → Physician Communications

- **Have the right information ready**
 - Medications
 - INR results
 - Warfarin dosing patterns
 - Any special conditions

Nurses with years of experience communicating with physicians offer a series of suggestions that are particularly important for telephone communications around nursing home residents taking warfarin.

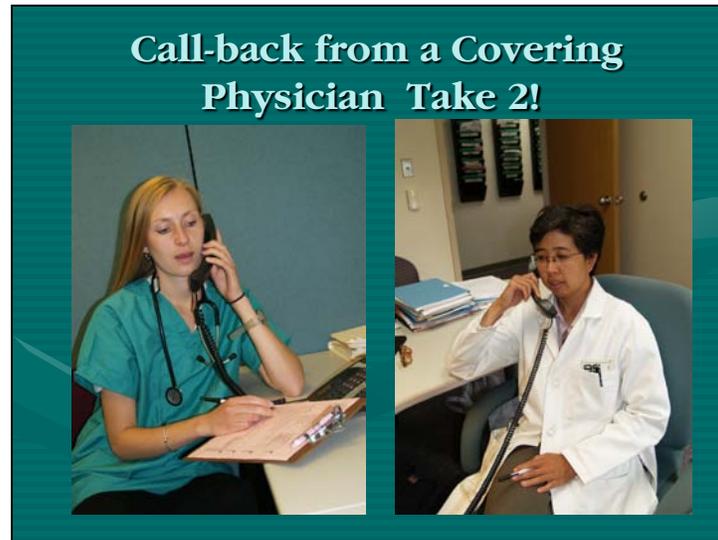
A critical recommendation is to prepare in advance all of the information the physician might need to make treatment decisions about a patient. For patients on warfarin, this would include the patient's medications, prior INR results, warfarin dosing patterns, and any special conditions.

Second, make full use of your nursing skills to clarify the patient's clinical status.

Improving Nurse → Physician Communications

- **Have the right information ready**
- **Use nursing assessment skills**
- **Focus on reaching an effective plan for the patient**

Finally, during the conversation, focus your attention on reaching an effective plan for the patient. Never allow a physician's impatience to distract you from that goal.



Narrator: Let's redo that earlier phone call from Dr. Kastle and see how things go if the nurse uses these recommended techniques.

[Phone rings. Nurse picks up phone.]

Nurse: Hello, 2 East, it's Ann Marie.

Doctor: Hi, this is Dr. Kastle.

Nurse: I'm calling about warfarin patient Mrs. Moynahan, one of Dr. Jones' patients. I'm calling about a new INR result. The INR is 4.1. Her previous INR on the 16th was 2.7 and 2 weeks prior to that it was 1.9. She's been on 5 mg of warfarin daily for the past 2 weeks. Before that, she was on 2.5 mg on Monday, Wednesday, and Friday, alternating with 5 mg on the other days. She's in AFib [atrial fibrillation]. She's also been on Bactrim for a urinary tract infection for the past 3 days. I'm uncomfortable because of her high INR, and she also has some new bruising on her arms. Do you want to hold her warfarin?

Doctor: What did you say her previous INR was?

Nurse: Her previous INR was on the 16th and it was 2.7 [then] and she's 4.1 right now.

Doctor: And the one before that was...

Nurse: Two weeks prior to that it was 1.9.

Doctor: Okay, so, why don't we hold the warfarin tonight and check another INR tomorrow? She's already been on Bactrim for 3 days, right?

Nurse: Right, and she has another 4 days to go.

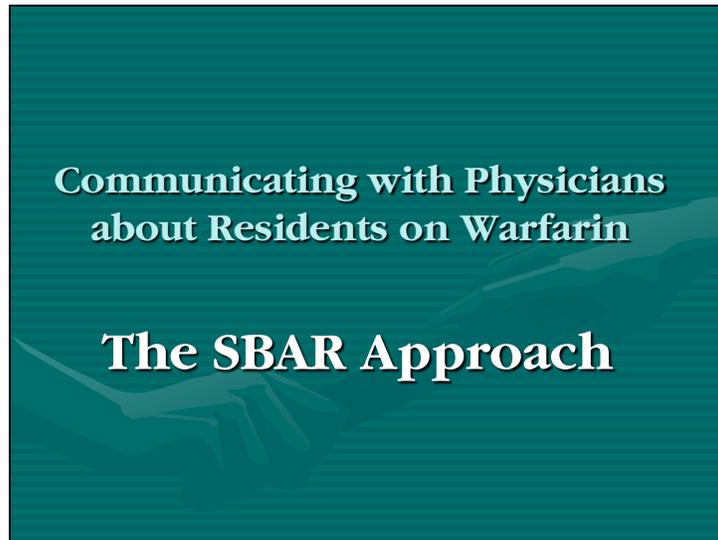
Doctor: Okay, why don't you stop the Bactrim and follow-up with her primary care [physician] in the morning?

Nurse: Okay, let me just read back the orders to you. Hold the warfarin tonight and stop the Bactrim. Repeat the INR in the morning and follow up with her primary [physician] in the morning.

Doctor: Right.

Nurse: Okay, very good, thanks so much for calling back.

Doctor: [Appreciative tone:] Thank you!



**Communicating with Physicians
about Residents on Warfarin**

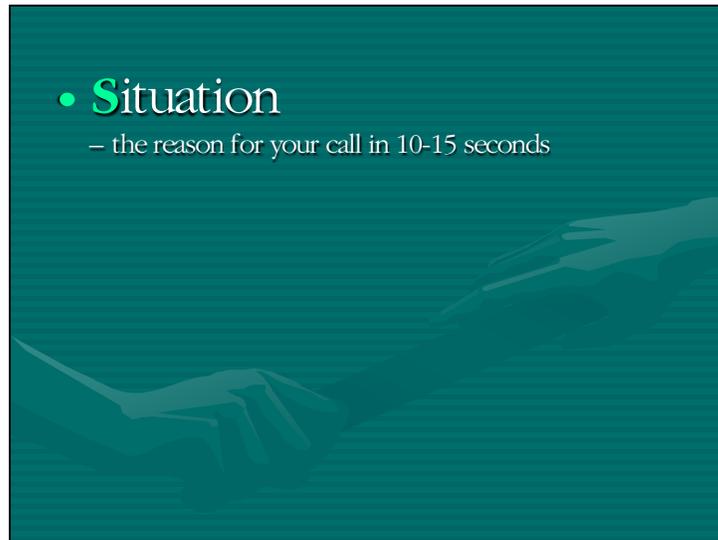
The SBAR Approach

I think you would agree that this second call was a lot more effective and satisfying. It used an approach for nurse/physician communication called SBAR (Situation, Background, Assessment, and Recommendation). The SBAR approach was originally developed by the military to clearly and concisely relay critical information in a standardized way. Recently, some hospitals and health care-delivery systems that have encountered safety problems similar to those we found for patients on warfarin have adapted the SBAR to the health-care setting.

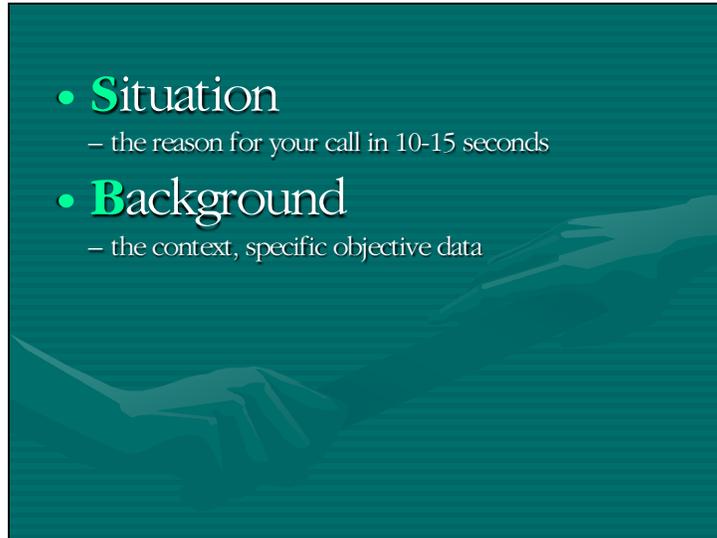
The S-B-A-R Approach for Nurse-Physician Communication

- **S**ituation
- **B**ackground
- **A**ssessment
- **R**ecommendations

Using SBAR, nurses use a standard approach for communicating patient information to physicians. They quickly summarize the patient's situation, the background, their assessment, and any recommendations. This approach is particularly useful when communications must be by telephone.



In SBAR, the situation is a quick, 5-to-10-second summary of the reason for the communication.



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- **Situation**
 - the reason for your call in 10-15 seconds
- **Background**
 - the context, specific objective data
- **Assessment**
 - nurse's assessment of the problem

In SBAR, the situation is a quick, 5-to-10-second summary of the reason for the communication.

- **Situation**
 - the reason for your call in 10-15 seconds
- **Background**
 - the context, specific objective data
- **Assessment**
 - nurse's assessment of the problem
- **Recommendations**
 - what do we need to do?

Recommendations include any recommendations from the nurse, as well as specific requests for physician recommendations, such as, "When do you want us to schedule the next INR?"

Why Use SBAR for Nurse/Physician Communications?

- Establishes consistent format so both parties know what to expect
- Provides nurses with a clear guide that ensures they have the information needed at their fingertips

SBAR lends itself to telephone communication between nurses and physicians in the nursing home setting for a number of reasons. Perhaps the most important reason is that it establishes the format for communication so that both parties come to know what to expect. From nurses' point of view, it provides a clear guide so that they know what information to assemble and are sure to have it at their fingertips when they speak with the physician.

The SBAR Form for Communications About Residents on Warfarin

Telephone communication about resident on warfarin

Date: _____

Originator of communication: _____

The issue I am calling about (select from the following options) is:

How long has this been going on? _____

Change in Condition:

- Fall with potential injury
- Fall with potential complication
- Other injury
- Other medication
- Abnormal lab test results
- Other, specify: _____

Fall without injury - Minor skin tear:

- No change/bleeding
- No redness noted
- No change
- No APTT

Last 2 APTT test results:

APT1 Date: _____ APT2 Date: _____

Chasing Pattern:

Current: _____ mg

Date from: _____

Daily to: _____

Other important medications the resident is taking (including past 2 days):

- ADVICE (e.g. Swallow, pinch, perfume, tobacco, medication, etc.)
- Medication - STOPPED (e.g. for HAT)
- No response

Situation

Background

To guide SBAR communications and ensure that all the information is assembled before calling a physician, we have constructed an SBAR form.

SBAR Form

• **Situation**

Originator of call: _____ I am calling about warfarin patient _____, one of Dr. _____'s patients at _____.			Situation
The issue I am calling about (select from the following options) is:			
New INR Result INR result: _____	Change in Condition <input type="checkbox"/> fall with potential injury <input type="checkbox"/> skin tear with potential complication <input type="checkbox"/> fever <input type="checkbox"/> ANY bleeding or bruising, describe: <input type="checkbox"/> other injury: <input type="checkbox"/> other medication issue: <input type="checkbox"/> abnormal UA test results <input type="checkbox"/> abnormal chest X-ray results <input type="checkbox"/> other, specify:	Fall without injury/ Minor skin tear <input type="checkbox"/> fall <input type="checkbox"/> no injury noted <input type="checkbox"/> no bleeding/ bruising <input type="checkbox"/> skin tear <input type="checkbox"/> no redness noted <input type="checkbox"/> no drainage <input type="checkbox"/> size apx _____ cm <small>If calling for one of these situations, skip to the recommended action section</small>	

In the Situation block on the form, indicate the type of situation you are contacting the physician about.

SBAR Form

• Situation

Originator of call: _____ I am calling about warfarin patient _____, one of Dr. _____'s patients at _____.		
The issue I am calling about (select from the following options) is:		
New INR Result INR result: <u>3.0</u>	Change in Condition <input type="checkbox"/> fall with potential injury <input type="checkbox"/> skin tear with potential complication <input type="checkbox"/> fever <input type="checkbox"/> ANY bleeding or bruising, describe: <input type="checkbox"/> other injury: <input type="checkbox"/> other medication issue: <input type="checkbox"/> abnormal UA test results <input type="checkbox"/> abnormal chest Xray results <input type="checkbox"/> other, specify:	Fall without injury/ Minor skin tear <input type="checkbox"/> fall <input type="checkbox"/> no injury noted <input type="checkbox"/> no bleeding/ bruising <input type="checkbox"/> skin tear <input type="checkbox"/> no redness noted <input type="checkbox"/> no drainage <input type="checkbox"/> size apx. _____ cm If calling for one of these situations, skip to the recommended action section

Situation

For example, if your goal is to communicate a new INR result, fill in that result in the Situation block.

SBAR Form

• Situation

Originator of call: _____ I am calling about warfarin patient _____, one of Dr. _____'s patients at _____.		
The issue I am calling about (select from the following options) is:		
New INR Result INR result: <u>3.0</u>	Change in Condition <input checked="" type="checkbox"/> fall with potential injury <input type="checkbox"/> skin tear with potential complication <input type="checkbox"/> fever <input type="checkbox"/> ANY bleeding or bruising, describe: <input type="checkbox"/> other injury: <input type="checkbox"/> other medication issue: <input type="checkbox"/> abnormal UA test results <input type="checkbox"/> abnormal chest X-ray results <input type="checkbox"/> other, specify:	Fall without injury/ Minor skin tear <input type="checkbox"/> fall <input type="checkbox"/> no injury noted <input type="checkbox"/> no bleeding/ bruising <input type="checkbox"/> skin tear <input type="checkbox"/> no redness noted <input type="checkbox"/> no drainage <input type="checkbox"/> size apx. _____ cm If calling for one of these situations, skip to the recommended action section

Situation

For example, if your goal is to communicate a new INR result, fill in that result in the Situation block.

SBAR Form

• Situation

Originator of call: _____ I am calling about warfarin patient _____ one of Dr. _____'s patients at _____.		
The issue I am calling about (select from the following options) is:		
New INR Result INR result: <u>3.0</u>	Change in Condition <input checked="" type="checkbox"/> fall with potential injury <input type="checkbox"/> skin tear with potential complication <input type="checkbox"/> fever <input type="checkbox"/> ANY bleeding or bruising, describe: <input type="checkbox"/> other injury: <input type="checkbox"/> other medication issue: <input type="checkbox"/> abnormal UA test results <input type="checkbox"/> abnormal chest Xray results <input type="checkbox"/> other, specify:	Fall without injury/ Minor skin tear <input type="checkbox"/> fall <input type="checkbox"/> no injury noted <input type="checkbox"/> no bleeding/ bruising <input checked="" type="checkbox"/> skin tear <input checked="" type="checkbox"/> no redness noted <input type="checkbox"/> no drainage <input type="checkbox"/> size apx. _____ cm If calling for one of these situations, skip to the recommended action section

Situation

Some contacts are purely informational about situations involving no injury or a minor skin tear. In that case, check the appropriate box on the right-hand section of the Situation block, then go directly to the Recommended Action block at the bottom of the form. In this situation, there is no need to complete the Background and Assessment blocks in the middle of the form.

SBAR Form

- **Background**

Last 2 INR test results		Dosing pattern	Date from	Date to
INR Date	INR			
_____	_____	Current _____ mg	_____	_____
_____	_____	Previous _____ mg	_____	_____

Indication for warfarin: AFIB DVT/PE Mechanical heart valve Other _____

Other important medications the resident is taking (including last 3 days):

- NSAIDs (e.g., ibuprofen, aspirin, motrin, piroxicam, indocin, meloxicam, etc.)
- antibiotics:
- aspirin or Plavix (clopidogrel)

Background

The Background block is specifically designed to include the major issues related to warfarin use.

SBAR Form

- **Background**

Last 2 INR test results		Dosing pattern	Date from	Date to
INR Date	INR	Current	_____	_____
<u>10/04</u>	<u>3.3</u>	_____ mg	_____	_____
<u>9/27</u>	<u>2.8</u>	Previous	_____	_____
		_____ mg	_____	_____

Indication for warfarin: AFIB DVT/PE Mechanical heart valve Other _____

Other important medications the resident is taking (including last 3 days):

- NSAIDS (e.g., ibuprofen, aspirin, motrin, piroxicam, indocin, meloxicam, etc.)
- antibiotics:
- aspirin or Plavix (clopidogrel)

Background

The first area in the Background section should be completed by filling in the previous two INR levels with the dates of those tests. This is necessary because of the way the human body responds to warfarin. A change in the warfarin dose (either up or down) may not affect the INR level until 2 to 3 days later. Doctors no longer use PT test results to make decisions about warfarin management, so only the INR results are needed on this form.

SBAR Form

- **Background**

Last 2 INR test results		Dosing pattern	Date from	Date to
INR Date	INR	Current		
10/04	3.3	_____ mg	_____	_____
9/27	2.8	Previous _____ mg	_____	_____

Indication for warfarin: AFIB DVT/PE Mechanical heart valve Other _____

Other important medications the resident is taking (including last 3 days):

- NSAIDS (e.g., ibuprofen, aspirin, motrin, proxicam, indocin, meloxicam, etc.)
- antibiotics:
- aspirin or Plavix (clopidogrel)

Background

The next area relates to the current and previous dosing patterns. This could include “hold dose” periods.

SBAR Form

- **Background**

Last 2 INR test results		Dosing pattern		Date from	Date to
INR Date	INR	Current			
<u>10/04</u>	<u>3.3</u>	<u>hold</u>	mg	<u>10/04</u>	<u>10/06</u>
<u>9/27</u>	<u>2.8</u>	Previous	<u>M/W/F 2.5mg/5 TuThSSu</u>	mg	<u>9/27</u> <u>10/03</u>

Indication for warfarin: AFib DVT/PE Mechanical heart valve Other _____

Other important medications the resident is taking (including last 3 days):

- NSAIDS (e.g., ibuprofen, aspirin, motrin, previcam, indocin, meloxicam, etc.)
- antibiotics:
- aspirin or Plavix (clopidogrel)

Background

For example, if warfarin is currently being held, indicate the date when the order to hold warfarin began and the current date. Then, complete the section on the previous dosing pattern and the dates when it began and ended.

SBAR Form

- **Background**

Last 2 INR test results		Dosing pattern	Date from	Date to
INR Date	INR	Current		
10/04	3.3	hold	10/04	10/06
9/27	2.8	Previous M/W/F 2.5mg/5 TuThSSu	9/27	10/03

Indication for warfarin: AFIB DVT/PE Mechanical heart valve Other _____

Other important medications the resident is taking (including last 3 days):

- NSAIDS (e.g., ibuprofen, aspirin, morphine, proxeam, indocin, meloxicam, etc.)
- antibiotics:
- aspirin or Plavix (clopidogrel)

Background

As we described earlier, the optimum range for the INR is related to the reason why the patient has been prescribed warfarin. If you know the indication for warfarin treatment for the patient, check it in this section. This is important information to convey to the physician.

SBAR Form

- **Background**

Last 2 INR test results		Dosing pattern	Date from	Date to
INR Date	INR	Current		
<u>10/04</u>	<u>3.3</u>	<u>hold</u> mg	<u>10/04</u>	<u>10/06</u>
<u>9/27</u>	<u>2.8</u>	Previous <u>M/W/F 2.5mg/5 TuThSSu</u> mg	<u>9/27</u>	<u>10/03</u>

Indication for warfarin: AFIB DVT/PE Mechanical heart valve Other _____

Other important medications the resident is taking (including last 3 days):

- NSAIDs (e.g., ibuprofen, aspirin, motrin, piroxicam, indocin, meloxicam, etc.)
- antibiotics:
- aspirin or Plavix (clopidogrel)

Background

Many medications—including NSAIDs [nonsteroidal antiinflammatory drugs], antibiotics, aspirin, and Plavix®, can interact with warfarin to intensify its effect. Include any of these drugs that the patient has taken any time over the past 3 days.



The image shows a slide titled "SBAR Form" with a dark teal background. Underneath the title, there is a section labeled "Assessment" with a green bullet point. Below this, there is a white rectangular box containing a form. The form has three rows of text with checkboxes. The first row is " No concerns". The second row is " I'm uncomfortable about this patient because: high INR bleeding/bruising". The third row is " other (describe):" followed by a large empty space for text. To the right of this box, the word "Assessment" is written vertically in a white box.

SBAR Form

- Assessment

<input type="checkbox"/> No concerns	Assessment
<input type="checkbox"/> I'm uncomfortable about this patient because: <input checked="" type="checkbox"/> high INR <input type="checkbox"/> bleeding/bruising	
<input type="checkbox"/> other (describe):	

The Assessment block gives you space to add information about your perception of the patient's needs. If you are particularly worried about this patient's condition, describe your concerns briefly in this section.

SBAR Form

• **Recommended actions**

Say what you think would be helpful or needs to be done, which might include:

- No new orders needed

INR/Warfarin Recommendations

- Tell me if the warfarin dose should be changed
- Tell me when to repeat the INR? in 3 days in 7 days other: _____

Other Recommendations

- Tell me whether to order an antibiotic
 - If so, should we adjust the warfarin dose?
 - When should we schedule the next INR test?
- Tell me whether to order other tests
- Order for dressing Order for ointment
- Should we send the patient to emergency department

When do you want us to call again (or under what conditions)?

**ENTER ALL ORDERS
DIRECTLY ONTO THE
PHYSICIAN ORDER
SHEET**

**Recommended Action
Based on Nurse Assessment**

The Recommended Action block calls for you to check all of the issues on which you wish to get information from the physician. This section offers the opportunity to say what is on your mind and to specify what orders you need from the physician.

SBAR Form

• Recommended actions

Say ~~what you think~~ would be helpful or needs to be done, which might include:

No new orders needed

INR/Warfarin Recommendations

Tell me if the warfarin dose should be changed

Tell me when to repeat the INR? in 3 days in 7 days other: _____

Other Recommendations

Tell me whether to order an antibiotic

If so, should we adjust the warfarin dose?

When should we schedule the next INR test?

Tell me whether to order other tests

Order for dressing Order for ointment

Should we send the patient to emergency department

When do you want us to call again (or under what conditions)?

**ENTER ALL ORDERS
DIRECTLY ONTO THE
PHYSICIAN ORDER
SHEET**

Recommended Action
Based on Nurse Assessment

If you are not planning to request any specific recommendations, check the “no new orders needed” box.

SBAR Form

• Recommended actions

Say what you think would be helpful or needs to be done, which might include:

No new orders needed

INR/Warfarin Recommendations

Tell me if the warfarin dose should be changed

Tell me when to repeat the INR? in 3 days in 7 days other: _____

Other Recommendations

Tell me whether to order an antibiotic

If so, should we adjust the warfarin dose?

When should we schedule the next INR test?

Tell me whether to order other tests

Order for dressing Order for ointment

Should we send the patient to emergency department

When do you want us to call again (or under what conditions)?

**ENTER ALL ORDERS
DIRECTLY ONTO THE
PHYSICIAN ORDER
SHEET**

**Recommended Action
Based on Nurse Assessment**

If you want to know if the warfarin dose should be changed or when the INR should be repeated, check boxes in the INR/warfarin recommendations section.

SBAR Form

• Recommended actions

Say what you think would be helpful or needs to be done, which might include:

No new orders needed

INR/Warfarin Recommendations

Tell me if the warfarin dose should be changed

Tell me when to repeat the INR? in 3 days in 7 days other: _____

Other Recommendations

Tell me whether to order an antibiotic

If so, should we adjust the warfarin dose?

When should we schedule the next INR test?

Tell me whether to order other tests

Order for dressing Order for ointment

Should we send the patient to emergency department

When do you want us to call again (or under what conditions)?

**ENTER ALL ORDERS
DIRECTLY ONTO THE
PHYSICIAN ORDER
SHEET**

**Recommended Action
Based on Nurse Assessment**

If you believe the patient's condition suggests a need for antibiotics, additional tests, or an emergency department visit, check boxes in that section. In many cases, you will also want to ask the physician when or under what conditions he or she wants you to call them back.

SBAR Form from the Call with Covering Physician

Originator of call: _____ I am calling about warfarin patient _____, one of Dr. _____'s patients at _____.		
The issue I am calling about (select from the following options) is:		
New INR Result INR result: <u>4.1</u>	Change in Condition <input type="checkbox"/> fall with potential injury <input type="checkbox"/> skin tear with potential complication <input type="checkbox"/> fever <input checked="" type="checkbox"/> ANY bleeding or bruising, describe: <input type="checkbox"/> other injury: <input type="checkbox"/> other medication issue: <input type="checkbox"/> abnormal UA test results <input type="checkbox"/> abnormal chest Xray results <input type="checkbox"/> other, specify:	Fall without injury/ Minor skin tear <input type="checkbox"/> fall <input type="checkbox"/> no injury noted <input type="checkbox"/> no bleeding/ bruising <input type="checkbox"/> skin tear <input type="checkbox"/> no redness noted <input type="checkbox"/> no drainage <input type="checkbox"/> size apx. _____ cm If calling for one of these situations, skip to the recommended action section
		Situation

Here is the Situation block from the SBAR form that nurse Ann Marie completed before calling Dr. Kastle. Because she was calling about a new high INR result, she entered that result in the Situation block. She had also noted bruising on Mrs. Moynahan's arms, so she checked that box under Change in Condition.

SBAR Form from the Call with Covering Physician

Last 2 INR test results		Dosing pattern	Date from	Date to
INR Date	INR	Current		
<u>8/16</u>	<u>2.7</u>	Current <u>5 mg each day</u> mg	<u>8/16</u>	<u>8/30</u>
<u>8/2</u>	<u>1.9</u>	Previous <u>2.5 MWF 5 TuThSaSu</u> mg	<u>8/2</u>	<u>8/16</u>

Indication for warfarin: AFIB DVT/PE Mechanical heart valve Other _____

Other important medications the resident is taking (including last 3 days):

NSAIDS (e.g., ibuprofen, aspirin, motrin, piroxicam, indocin, meloxicam, etc.)

antibiotics: Bactrim - started 8/27 for a UTI

aspirin or Plavix (clopidogrel)

Background

In the Background section, she entered the previous two INRs and their dates, then entered information about the current and previous dosing pattern. She knew that Mrs. Moynahan had atrial fibrillation—important information for the doctor’s decisions about warfarin. She also added information about the Bactrim that Mrs. Moynahan was receiving for her UTI [urinary tract infection].

SBAR Form from the Call with Covering Physician

<input type="checkbox"/> No concerns <input checked="" type="checkbox"/> I'm uncomfortable about this patient because: <input checked="" type="checkbox"/> high INR <input checked="" type="checkbox"/> bleeding/bruising <input type="checkbox"/> other (describe):	Assessment
--	------------

The Assessment block gave the nurse an opportunity to point out to the physician that she was uncomfortable about the patient's high INR and bruising.

SBAR Form from the Call with Covering Physician

<p>Say what you think would be helpful or needs to be done, which might include:</p> <p><input type="checkbox"/> No new orders needed</p> <p>INR/Warfarin Recommendations</p> <p><input checked="" type="checkbox"/> Tell me if the warfarin dose should be changed</p> <p><input checked="" type="checkbox"/> Tell me when to repeat the INR? <input type="checkbox"/> in 3 days <input type="checkbox"/> in 7 days <input type="checkbox"/> other: _____</p> <p>Other Recommendations</p> <p><input type="checkbox"/> Tell me whether to order an antibiotic</p> <p> <input type="checkbox"/> If so, should we adjust the warfarin dose?</p> <p> <input type="checkbox"/> When should we schedule the next INR test?</p> <p><input type="checkbox"/> Tell me whether to order other tests</p> <p><input type="checkbox"/> Order for dressing <input type="checkbox"/> Order for ointment</p> <p><input type="checkbox"/> Should we send the patient to emergency department</p> <p>When do you want us to call again (or under what conditions)?</p>	<p>ENTER ALL ORDERS DIRECTLY ONTO THE PHYSICIAN ORDER SHEET</p>	<p>Recommended Action Based on Nurse Assessment</p>
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In the Recommended Actions block, the nurse checked boxes to remind her to get information about possible warfarin dose changes and the timing for the next INR.

When Should SBAR be Used?

- Use SBAR for *every call on a warfarin patient* especially when reporting:
 - INR results
 - any change in condition
 - other abnormal lab test results
 - requests for medication clarifications

The SBAR approach and form should be used for every call about a warfarin patient when you are reporting:

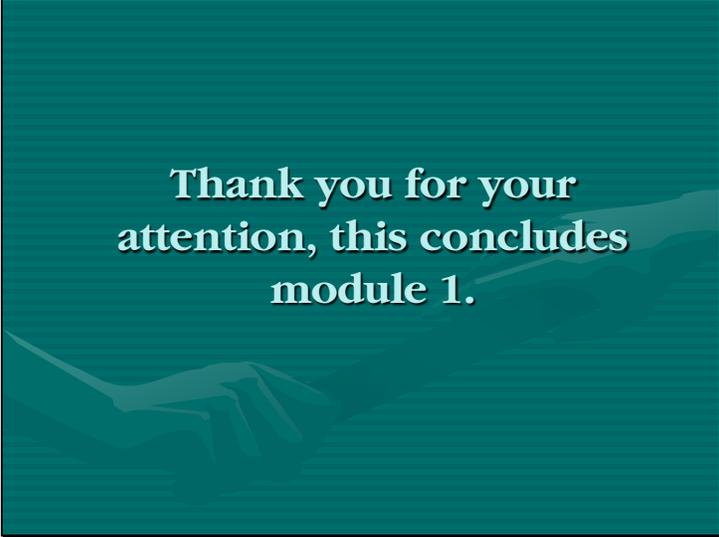
- INR results,
- any change in the patient's condition,
- abnormal lab test results, or
- if you are requesting clarification about medications.

Summary

- Warfarin – an important and effective therapy when appropriately dosed and monitored
- Prescribing and monitoring must be done carefully
- Adverse events with warfarin often result from errors in prescribing and monitoring
- Errors are related to poor information flow
- Nurses have access to important information
- Nurse/physician communications can be difficult

In summary, warfarin is an important and valuable therapy that is commonly used among older adults. Because of its potential for causing dangerous bleeds, prescribing and monitoring of warfarin must be done carefully. In a study of nursing home residents taking warfarin, we found many instances of adverse events resulting from errors in prescribing and monitoring. Nearly all of these events appeared to be related to inadequate information flow. Nurses have the information required to manage warfarin safely and effectively. However, communication between nurses and physicians is often difficult. Using an approach called SBAR, we hope to make communication between these two types of clinicians more effective.

Slide 54



**Thank you for your
attention, this concludes
module 1.**