FOCUS ON
ERROR PREVENTION

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VACCINES

To obtain the optimal benefit of vaccine administration, patients must receive the correct vaccine, at the correct dosage and at the correct time and interval. The variety of vaccines and dosing schedules available can be confusing and may lead to administration errors. Pharmacists can play a key role in preventing errors associated with vaccine administration.

CASE 1:

Rx
Havrix® 0.5ml
Sig: As directed
Mitte: 1 vial

The above Havrix® vaccine was prescribed for a twenty-one year old patient. Havrix® 1440 (Adult) contains 1ml of a sterile suspension containing formaldehyde-inactivated hepatitis A virus adsorbed onto aluminum hydroxide, while Havrix® 720 Junior contains 0.5ml of the same sterile suspension[1].

The above prescription as written therefore requires that Havrix® 720 Junior be dispensed. Since the patient is twenty-one year old, a call was made to the prescriber to confirm his intent. The physician confirmed that his intention was to prescribe the **1ml** Havrix® 1440 product. He apologized for the prescribing error.

CASE 2:

Rx
Twinrix®
Sig: As directed
Mitte: 1 vial

The above Twinrix® vaccine was prescribed for a ten year old child. The standard dosage for patients aged one to eighteen years old is Twinrix® **Junior** at 0, 1 and 6 months[2]. The pharmacist therefore assumed that the prescriber intended to prescribe Twinrix® Junior. The Twinrix® Junior vaccine was therefore prepared and dispensed.

While counselling the child's mother on the administration and dosing schedule of the vaccine, the pharmacist explained that the child will require two additional doses at the one month and six month interval. However, the mother explained that the physician informed her that the child will require only two doses and not three.

A call was therefore made to the prescriber to clarify his intention and to confirm that the prescription was for Twinrix®. The physician indicated that he did indeed intend to prescribe Twinrix® (Adult) for the ten year old patient.

He explained that he chose the alternate dosing schedule which includes only two Twinrix® (Adult) doses instead of the standard three Twinrix® Junior doses. Patient convenience was the main factor cited in making the decision.

RECOMMENDATIONS:

- Though computer generated prescriptions can minimize medication errors due to illegible handwriting, be aware that new types of errors may be introduced including computer entry errors.
- When dispensing vaccines, always consult an appropriate reference to confirm and adhere to the recommended vaccination schedule. Be aware of alternate dosing schedules.
- When counselling patients on vaccines, review the specific dosing schedule and the importance of adhering to this schedule. Suggest that they record the necessary dates on their calendar.
- Always contact the prescriber to clarify/confirm all prescriptions that appear ambiguous or incorrect.

REFERENCES:

1. Havrix® Product Monograph.
2. Twinrix® Product Monograph

Continue to send reports of medication errors in confidence to: Ian Stewart at ian.stewart2@rogers.com
Please ensure that all identifying information (e.g. patient name, pharmacy name, healthcare provider name, etc.) are removed before submitting.