Prescription Writing for Clinical Clerks

Historical Background
Historically, prescriptions were instructions from the physician to the patient or apothecary on how to make a medicinal preparation and how it should be consumed or used. These were literally recipes for the drugs being dispensed. (Do you recall what almost happened to Mr. Gower, the chemist in Capra’s classic “It’s a Wonderful Life,” if not for the intercession of brave young George Bailey?)

By the Nineteenth Century, pharmaceuticals were becoming more and more advanced, and proprietary formulae for medicines were becoming simultaneously more common. The precursors of our modern pharmaceutical giants were born. Today, it is extremely rare for a clinician to write such a prescription, and equally rare to find a pharmacy which, like old Mr. Gower’s, would be able to actually fill such a prescription. Our modern prescriptions have essentially become limited to prepackaged products and formulations. The task of the prescription writer has become limited to selecting the appropriate drug and communicating clearly what it should be and how it should be taken or used.

Modern Usage
Prescription writing is an important skill to practice during the Primary Care Clerkship. Some key points to remember:

- **Always write or print neatly.** Significant errors have been made in the past because of illegible handwriting being misread in the pharmacy. Such errors are completely preventable and wholly inexcusable.
- **Use your knowledge and resources wisely.** Know when to “look it up” when you’re not sure of the details or of which agent to use and how.
- **Always review the prescription with your preceptor(s).** Make sure you’ve chosen the correct dose, form, and duration of treatment, and that you’ve dispensed enough quantity and refills.
- **Always confirm that your patient is not allergic to the medication you intend to use.**

Sample Rx

<table>
<thead>
<tr>
<th>Marcus Walby, MD</th>
<th>In New York State, practitioner names must be imprinted or stamped only.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234 Main Street</td>
<td></td>
</tr>
<tr>
<td>Middleamerica, USA (800) REAL-DOC</td>
<td></td>
</tr>
</tbody>
</table>

| Name_________________________ | Date_________________________ |
| Address______________________ | Age__________________________ |

**Rx**

[drug] [strength] [form]

Disp [quantity]

Sig [instructions]

Refill(s) [times]

M.W.

Dispense As Written (initial)

Signed: **Marcus Walby, MD**

NYS Lic. 123456-1

DEA: WYLTK

The way you order “do not substitute” varies from state to state

Controlled substances require a D.E.A. number and, in N.Y.S., triplicate forms
### Commonly Used Abbreviations:

<table>
<thead>
<tr>
<th>Forms of drugs and amounts:</th>
<th>Route of administration (cont.):</th>
</tr>
</thead>
<tbody>
<tr>
<td>amp</td>
<td>O.U. oculi uterquii “both eyes”</td>
</tr>
<tr>
<td>cap, caps</td>
<td>p.o. per orum “by mouth”</td>
</tr>
<tr>
<td>HFN</td>
<td>p.r. per rectum</td>
</tr>
<tr>
<td>MDI</td>
<td>p.v. per vagina</td>
</tr>
<tr>
<td>oint</td>
<td>s.c. subcutaneously</td>
</tr>
<tr>
<td>soln</td>
<td></td>
</tr>
<tr>
<td>supp</td>
<td></td>
</tr>
<tr>
<td>susp</td>
<td></td>
</tr>
<tr>
<td>tab, tabs</td>
<td></td>
</tr>
<tr>
<td>gt</td>
<td></td>
</tr>
<tr>
<td>gtt</td>
<td></td>
</tr>
<tr>
<td>Q.S. quantum sufficient</td>
<td></td>
</tr>
<tr>
<td>quantity</td>
<td></td>
</tr>
</tbody>
</table>

### Route of administration:

| IM                                              | intramuscularly                                       |
| IN                                              | intranasal                                           |
| O.S. oculus sinister “left eye”                 |                                                        |
| O.D. oculus dexter “right eye”                  |                                                        |

### Exercises

The following are intended to give you a little practice writing prescriptions. Take some blank pieces of paper and give it a whirl!

**Case 1:** Joan Doe, a lass of 15 years, comes to the office complaining of headache. History reveals she is a member of the school swim team, and you find a markedly inflamed auditory canal on the right. After diagnosing otitis externa, you decide to put your patient on Vosol HC for five days. Write the prescription using abbreviations where appropriate.

**Case 2:** Mother Jones, a 76 year old woman, comes for her regular follow-up visit and renewal of her blood pressure medication. You learn that she has been medically stable for many years on a dose of 25mg of hydrochlorothiazide daily. After ordering any appropriate follow-up testing, you renew her medications for six months.

**Case 3:** Jane Q. Public, all of 3 months old, presents to the office with bilateral conjunctivitis and a known exposure to a family member with culture-confirmed, bacterial conjunctivitis sensitive to erythromycin. You decide to place her on erythromycin ophthalmic ointment.

**Case 4:** William Jefferson, a 50 year old chief executive, presents to the office with a painful urethral discharge after a sexual encounter with a new partner. Your examination leads you to believe this to be probable non-gonococcal urethritis (NGU). After appropriate counseling and testing, you decide to utilize a regimen of ofloxacin and azithromycin as one-time doses.

**Case 5:** Spiros Galaktos, a 67 year old retired pastry chef with diabetes comes in for regular follow-up. His current regimen includes 20 units of NPH and 5 units of Regular insulin every morning, and 5 units of NPH at bedtime. After ordering any necessary follow-up testing, you decide to renew his insulin and supplies. Write the needed prescriptions.
Answers

Case 1:  
Vosol HC otic soln.  
Disp. 10ml  
Sig. 5 gtt in right ear q.i.d. x 5 days  
No refills  
Comments: This drug comes in only one formulation, so it is not necessary to give all the concentrations of its components. Of course, you wouldn't simply treat this young woman's classic case of "swimmer's ear" with medication and send her on her way without counseling her on ways to prevent it from recurring.

Case 2:  
HCTZ 25mg tabs  
Disp. #30  
Sig. I po q.day  
Refill x5  
Comments: This is one of the very few drugs for which you may abbreviate the name. Although this woman will follow-up with you in 3 months for routine care of her hypertension, some practitioners will give six months supplies of medications for patient convenience, particularly when it is important that no break in therapy occur.

Two important observations on chronic medications are worthwhile noting here. Many insurers, including Medicare and Medicaid, will permit only one month supplies of medications to be supplied at one time. This restriction does not apply to self-pay patients, of course. This is important in that prestocked bottles of, say, 100 tablets will often cost less to the patient per tablet than having the pharmacist open the seal and dispense only 30. Your self-paying patients usually appreciate your concern and attention, especially if you give them the option of what to do. The second observation is that most states allow prescriptions to be valid only up to six months. This usually limits the number of refills to only five.

Case 3:  
Erythromycin ophth. oint.  
Disp. 10gm  
Sig. Apply thin ribbon O.U. t.i.d.  
No refills  
Comments: As this example shows, the drug reference materials will usually instruct you on the appropriate labeling of instructions for the drug being used. The "Sig." line contains your directions to the pharmacist as to how you would like those instructions to be labeled on the prescription dispensed.

Case 4:  
Oflagxin 400mg cap  
Disp. #1 (one)  
Sig. I p.o. stat.  
No refills  
Comments: This is one of the recommended drug regimens for urethritis in men. Its main advantage is convenience, both in terms of being p.o. medications and in terms of its one-time dosing. You would use this in the setting of appropriate counseling regarding safer sex, HIV and STD risk and risk reduction, and follow-up for the patient and his sexual partners.

Case 5:  
NPH human insulin  
Disp. Q.S. per 1 month  
Sig. 20 units p.c. q.A.M.  
5 units p.c. q.P.M.  
Refill x 3  

Regular human insulin  
Disp. Q.S. per 1 month  
Sig. 5 units q.A.M.  
Refill x 3  

1cc Syringes for insulin  
Dispense #100 (one hundred)  
Sig. Use b.i.d. as directed  
Refill x 1 (one)  

Accuchek sticks  
Dispense #100 (one hundred)  
Sig. Use b.i.d. as directed  
Refill x 3  

Lancets  
Dispense #100 (one hundred)  
Sig. Use b.i.d. as directed  
Refill x 3  

Comments: Mr. Galaktos requires several prescriptions for his medications and supplies. He uses two separate forms of insulin (regular and NPH), plus requires syringes, needles, lancets, and glucometer supplies for twice daily use.