

## Human Factors Design of Methadone Preparation Worksheet

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### Summary

Unit dose methadone preparation requires pharmacy staff to prepare the methadone required for each patient order based on a) the dosage and b) the volume of methadone solution used. A unit dose worksheet was required by pharmacy services staff to aid in the calculations and recording of methadone preparation. A worksheet was designed that incorporated the Human Factors principles of:

- *Information design* in the layout and formatting of the sheets
- *Readability* in the text, font, and tabular design
- Keeping *relevant information accessible* with the inclusion of units and decimal points
- Incorporation of *decision making aids* through the use of a “guided calculation” row

Through collaboration with pharmacy services staff, a final design of the worksheet was created. Design features of the sheets are outlined below. The worksheet is available on the next page.

<p>One box per digit, mitigating confusion with interpreting numbers</p> <p>Incorporation of units as reminder for end user</p>	<p><b>Methadone Cherry Flavoured Syrup: Unit Dose Worksheet</b></p> <p><i>Dispensing Pharmacist:</i> Complete assessment checklist on page 2 before dispensing, then sign attestation below.</p> <p>I certify that I have completed all items on assessment checklist on page 2.</p> <p>Pharmacist's signature _____ Date (dd-mm-yy) _____</p> <p>Directions for preparing solution:          1. Shake well.          2. Measure appropriate volume of Methadone 10mg/mL Cherry Flavoured Syrup in Oral Syringe.          3. Attach appropriate auxiliary labels.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date (dd-mm-yy)</th> <th>Dose (mg)</th> <th><math>\div 10 \text{ mg/ml}</math></th> <th>VOLUME of Methadone Solution (mL) <i>Do not use trailing zeros</i></th> <th>Number of Doses Prep</th> <th>= Total volume used (mL) <i>Do not use trailing zeros</i></th> <th>Narcotic Number</th> <th>Prepared by:</th> <th>Checked by:</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> </tbody> </table> <p><i>Technician:</i> Upon patient discharge, forward all documentation to pharmacist for final review and documentation.</p> <p><input type="checkbox"/> Community pharmacy notified of patient discharge.  <input type="checkbox"/> Methadone Clinic notified of patient discharge.</p> <p>_____ Pharmacist's signature _____ Date (dd-mm-yy) _____</p>	Date (dd-mm-yy)	Dose (mg)	$\div 10 \text{ mg/ml}$	VOLUME of Methadone Solution (mL) <i>Do not use trailing zeros</i>	Number of Doses Prep	= Total volume used (mL) <i>Do not use trailing zeros</i>	Narcotic Number	Prepared by:	Checked by:																																																																									<p>“Guided calculations” built into the sheet as an aid, and used for verifying calculations</p> <p>Decimal place built into form so it is not missed or misinterpreted</p>
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## Methadone Cherry Flavoured Syrup: Unit Dose Worksheet

*Dispensing Pharmacist:*

**Complete assessment checklist on page 2 before dispensing, then sign attestation below.**

I certify that I have completed all items on assessment checklist on page 2.

*Pharmacist's signature*

## Directions for preparing solution:

1. Shake well.
  2. Measure appropriate volume of Methadone **10mg/mL** Cherry Flavoured Syrup in Oral Syringe.
  3. Attach appropriate auxiliary labels.

Affix inpatient  
identification  
label here

Affix prescription  
label here

Date (dd-mm-yy)

**Technician:** Upon patient discharge, forward all documentation to pharmacist for final review and documentation.

- Community pharmacy notified of patient discharge.
  - Methadone Clinic notified of patient discharge.

**Pharmacist's signature** \_\_\_\_\_ **Date (dd-mm-yy)**

## **Methadone Assessment Checklist**

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**All items must be completed by the pharmacist prior to dispensing.**

**Pharmacist to sign on page 1, attesting that all items have been completed.**

- Previous methadone dosage confirmed with: (check all that apply)
- Patient     Community pharmacy \_\_\_\_\_ (*Name of Pharmacy*)     Methadone Clinic
- Previous methadone dosage is \_\_\_\_\_
- Last methadone dose given on \_\_\_\_\_ (*Date*)
- Completed *Temporary Methadone Exemption* form faxed to Office of Controlled Substances (if physician does not already have exemption).
- Community pharmacy notified of patient admission.
- Pharmacy: \_\_\_\_\_ Phone number: \_\_\_\_\_
- Pharmacist: \_\_\_\_\_ (*Name*) or  Message left with answering service
- Methadone Clinic notified of patient admission. (*Do not delegate this to the community pharmacist*)
- Methadone Clinic: \_\_\_\_\_ Phone number: \_\_\_\_\_
- Physician     Nurse \_\_\_\_\_ (*Name*) or  Message left with answering service  
(check one)

### **Additional Comments (optional)**

Pharmacist signature \_\_\_\_\_

Date (dd-mm-yy) \_\_\_\_\_