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.

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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           Date (dd-mmm-yy)

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.

<table>
<thead>
<tr>
<th>Date (dd-mmm-yy)</th>
<th>Dose (mg)</th>
<th>( \div 10 \text{ mg/ml} )</th>
<th>= Volume of Methadone Solution (mL)</th>
<th>( \times ) Number of Doses Prep</th>
<th>= Total volume used (mL)</th>
<th>Narcotic Number</th>
<th>Prepared by:</th>
<th>Checked by:</th>
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</table>

**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-mmm-yy)
Methadone Assessment Checklist

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 _________________________ ☐ Methadone Clinic (Name of Pharmacy)

☐ 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: ____________________________ or ☐ Message left with answering service (Name)

☐ Methadone Clinic notified of patient admission. (Do not delegate this to the community pharmacist)

Methadone Clinic: ____________________________ Phone number: ________________________

☐ Physician ☐ Nurse ____________________________ or ☐ Message left with answering service (check one) (Name)

Additional Comments (optional)

_________________________________________  _________________________
Pharmacist signature                Date (dd-mmm-yy)