Standard Operating Policy and Procedure:

**Crushing Medication**

**Purpose**

The aim of this procedure is to provide direction and support for the safe and effective management of medications when it is necessary to alter a solid dose medication during medication administration. People who are unable to swallow solid oral medications may include the following:

- Residents who find it difficult to swallow tablets or capsules and are assessed according to facility policies and procedures.
- Residents who have medications administered via an enteral feeding tube

The procedure aims to manage the alteration of solid oral medication doses in the following ways:

- Crushing of a tablet
- Opening of a capsule
- Chewing or dissolving in the mouth of the contents of a capsule or tablet before swallowing as this may have the same effect as crushing a tablet or opening a capsule

This policy does not cover altering of solid dose cytotoxic medicines or immunosuppressant medications.

**Policy Statement**

This policy is to support the administration of the right medicine to the right person at the right time using the right dose via the right route in accordance with the product information wherever possible.

Altering solid dosage forms by crushing tablets / opening capsules or chewing medicines may result in reduced effectiveness, a greater risk of toxicity, or in an unacceptable taste or texture.

The crushing of a tablet or opening of a capsule before administration can increase risks and liabilities to responsible individuals and organisations. Generally, any changes, for example opening or crushing of a solid oral medication, is outside a product’s licence / registration and may be considered “off –label” use. Manufacturers may disclaim liability for harm that may occur to the individual receiving an altered medication.

Clear documentation and evidence –based, safe and effective practice may reduce risks and liabilities. Written consent from the resident or legal guardian where possible may also minimise liability.

**Definitions**

- RACF - Residential Aged Care Facility
- DAA – Dose Administration Aid

**Scope**
The provision of safe and effective alteration of solid dose medications prior to administration to residents is undertaken by a Registered Nurse, Enrolled Nurse or Care Worker who has the knowledge, skills and competence to administer medications and authorised by the facility to undertake such a role.

Procedure

Determine if the need to alter the medication is a short or long-term problem and follow the subsequent procedures. Appendix 1 provides a flow chart describing the decision making process, before administering medications to people with swallowing difficulties.

Short Term
If the need to alter the medication will be short term:

1. Contact GP to determine if it is safe to stop medication temporarily
2. **IF YES:** Temporarily stop medication until condition improves
   **IF NO:** Request alternative dose forms and/or confirmation of the order to crush medication
3. Document decision in progress notes and mark as withheld on medication signing sheet/electronic signing program
4. Review as appropriate
5. Inform patient or legal guardian

Long Term
If the need to alter the medication has been assessed as long term:

1. Review the medication chart and seek advice from a speech pathologist, prescriber, pharmacist and other health professionals considered appropriate, to answer the following questions:
   a. Is the oral route appropriate? If not, is there a therapeutically equivalent alternative available?
   b. Is there an alternative formulation available that is safe to alter with the equivalent therapeutic effect? For example;
      ▪ Liquid formulation if there is no risk of aspiration or specific considerations
      ▪ Dispersible formulation
      ▪ Tablet or capsule that is suitable for dispersing or crushing.
   c. Is the consistency of the modified medicine suitable for this type of swallowing problem? e.g. thickened fluid
   d. Do the dose and frequency of administration need to be changed?
   e. Will the frequency of therapeutic monitoring need to be increased? Consider with caution medications with a narrow therapeutic index e.g. Warfarin, lithium, digoxin, phenytoin
2. Consult with resident or legal guardian and obtain consent to alter solid dose medicines
3. Prescriber alters medication chart and supply new prescriptions if needed and to provides written approval to alter solid dose medication
4. Document consultations and activity in progress notes
5. Document that medications are to be crushed or altered on Resident Identification Chart and if required apply “Crush” stickers to medication charts and signing sheets and if possible the Webster-pak medication folders
6. Notify the supply pharmacy to update their database, ensuring consistency of information

Prepare and administer medications according to the flow chart in Appendix 2.

**Special Considerations**

- Crushed or dispersed medicines may be unpalatable and may numb the mucosa. There are also increased risks of oesophageal irritation and burns. After administration of medicine, give at least 60ml of water or thickened fluids (or less if on fluid restriction). Rinsing the mouth with water will also reduce the risks of burns and further swallowing problems. For people who are unable to take water consider spraying their mouth/throat with a water atomiser.

- Consider the properties of the diluents before mixing e.g. acidity, thickness, stickiness and potential interaction with medication e.g. calcium in dairy products. If the diluents is too thick and sticky the it is difficult to recover the full dose from the container. This may be significant with narrow therapeutic index medications.

- When administering slow release beads or granules in water or on soft food the person must have the ability to swallow the medicine without chewing.

- Consider Workplace Health and Safety when altering solid oral doses. There is a risk of aerosols and air-borne particles, which may be potent, cause irritation or sensitisation. Extra precautions may be necessary for women who are pregnant or intending to become pregnant. Information and advice is available from individual drug monographs, local policy and guidelines and/or from a pharmacist or drug information service. Cytotoxic medications must not be crushed outside an approved cytotoxic cabinet.
Technique for Using a Rhino Crush

Rhino Crush™
Tablet Crusher

Instructions for use

STEP 1
Place medications between two crush cups. This will prevent cross contamination and ensure no medication powder is lost.

STEP 2
With minimal effort, press the handle downward to crush the tablets. For best results crush 3 or 4 times, rotating the cups as you crush. NOTE: Do not use force to push down on the tablets. Rather, use minimal effort and rotate cups until a fine powder is achieved.

STEP 3
Once the medications are crushed, place suitable vehicle (e.g., Puree) into the crush cup ready for administration.

Money Back Guarantee*
- Minimal effort required
- Reduce OHS risks
- Minimal noise
- Crushes to a fine powder
- Easy to clean

*Conditions apply: money back guarantee applies within 1 month of ordering the Rhino Crush. Rhino Crush must be returned with clip, in clean, working order.
Legislation

- State Workplace Health and Safety Act

References

- Accreditation standard 2.7 – Medication Management
- Guidelines for Medication Management in Residential Aged Care Facilities (Australian Pharmaceutical Council 2002); Appendix F Guidelines and Standard Operating Procedures for Altering Medication Dose Forms
Appendix 1
Algorithm for the medication management of adults with swallowing difficulties (from http://www.eGuidelines.co.uk)

Is the swallowing difficulty likely to be long-term?

No

Is it safe to stop the treatment temporarily?

Yes

Consider alternative routes of administration

Is the oral route appropriate?*

No

Is a liquid or dispersible product available?†

Yes

Can the consistency be modified safely?*

No

Temporarily discontinue the medication until swallowing improves
Document decision
Review as appropriate, communicating review duration to patient carer

Yes

Consider dosage and frequency equivalence
Prescribe liquid/dispersible product
Document activity
Consider monitoring requirements for clinical efficacy

Seek advice from:
* Speech and language therapist +/- occupational therapist, physiotherapist, dietitian (if involved in dysphagia management)
† Supplying pharmacist and/or Medicines Information Centre
Appendix 2
Medication Administration Flow Chart – Alteration of Solid Oral Dose

1. Identify resident and identify medication on primary medication chart
2. Confirm resident is ready to take their medication and are upright and alert
3. Prepare medication for administration using a Rhino-crush and mix with a suitable diluent
4. Give a small volume of water to aid swallowing (thickened if needed)
5. Administer medications one mouthful at a time and continue until all medicines are given
6. Give at least 60ml of water to aid swallowing (thickened if needed)
7. Rinse mouth or spray with water atomiser if needed

*Adapted from Australian Don't Rush To Crush Handbook published SHPA first edition 2012