





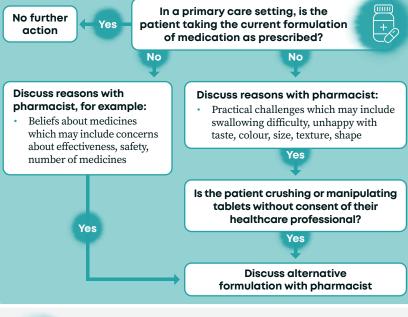
Dysphagia is a common complication of other conditions, occurring in up to:

- Two thirds of patients suffering stroke
- Two thirds of patients with dementia
- Over half of people in care homes.<sup>1</sup>

#### Crushing tablets can:

- Change pharmacokinetic or bioavailability profile of the medicine
- Affect absorption
- Reduce efficacy
- Increase risk of side effects.<sup>2</sup>

Liquid medicines can help minimise risk when chosen to meet the person's swallowing needs. This is best undertaken in conjunction with appropriate expert clinicians, such as speech and language therapists and pharmacists.



### **Helpful information:**



- <u>Defining and identifying thickness of fluids and food for</u> patients with swallowing difficulties
- Using thickeners of different types for patients with swallowing difficulties
- Thickening liquid medications

### Is the patient reporting any of the following:

- Coughing or choking when eating or drinking
- Food coming back up (mouth or nose)
- Feeling food is stuck (throat or chest)
- · Drooling, difficulty chewing
- · A "gurgling" voice when eating or drinking

# What fluid consistency and food texture can the dysphagic patient swallow?

- Think about the licensed liquid medication viscosity, is it too thin?
- Do not add thickener
- Is the patient eating textured food?
- Can the oral tablet be administered whole, halved or quartered with food (check drug-food interactions)
- Does the tablet need to be crushed or capsule be opened and administered with food?

| Туре              | Crushable/Dissolvable |
|-------------------|-----------------------|
| Film-coated       | Yes                   |
| Sugar-coated      | Yes                   |
| Capsule contents  | Yes                   |
| Liquids           | No                    |
| Sub-lingual       | No                    |
| Buccal            | No                    |
| Enteric-coated    | No                    |
| Sustained release | No                    |

# Patient groups most affected:

Stroke, dementia, head and neck cancer, intellectual disabilities.<sup>3</sup>

Dysphagia affects many people in the UK; including up to 50% of the elderly.<sup>4</sup> Approximately one-third of care home residents experience difficulty swallowing.<sup>3</sup>

An inability to take solid forms of medications, such as tablets, can compromise adherence to medicine and reduce benefits.<sup>5</sup>

The Royal Pharmaceutical Society advises that if the formulation of a medicine is manipulated, then the product will then be classed as unlicensed.<sup>6\*</sup>

# £

### **Financial impact**

- Unused medicines cost an estimated £1.3 billion a year  $^7$
- Adverse drug reactions cost approximately £625 million <sup>7</sup>
- Health deterioration calls for an increased demand in healthcare.<sup>8</sup>



#### **Environment**

Avoiding £150 million of unused medicines equates to total avoidable emissions of 23.4 thousand tonnes CO2e from the manufacturing and supply of pharmaceuticals.<sup>9</sup>



### Minimising risk to patients and staff

When products are used outside of their product license greater liability rests with the individual prescriber <u>Liability</u> can be minimised by:

- Clear documentation of the reason for altering the administration route of the medicine
- Administration: Following evidence-based, safe, effective practice, including education of staff/carers/family
- **For clinicians:** Obtaining consent from or a "best interest" judgement needs to occur.

Choosing
the correct
formulation
can be as
important as
the treatment
itself

References: 1. Royal college of speech and language therapy (2018) Guidance on the management of dysphagia in care homes 2. Survey of medicines related care of residents with dysphagia in care homes, 2015, The Patients Association. 3. Wright et al, Medication Management of Adults with Swallowing Difficulties. 2015 4. Clave et al, Nature Reviews Gastroenterology & Hepatology. 2015 May;12(5):259. 5. Strachan and Greener Pharmacy in Practice, 2005, 15(10):411-414. 6. RPS Pharmaceutical Issues when crushing, opening or splitting oral dosage forms. June 2011. 7. Greener M. JME 2006;9:27-44. 8. NICE Guideline. Clinical Guideline [CG76] Published date: 28 January 2009 9. Stockholm Environmental Institute work undertaken in 2014/15 for the SDU carbon footprint of the health and social care sector.