

### 1. Problem

Observation of poor inconsistent position of patient's arm for patients who had suffered significant paralysis following a stroke. 30-70% of stroke patients have reduced or no use of their arm.

#### Evidence

- Shoulder pain prevalence estimates as high as 84%, occurring from 2 weeks to several months.
- Good arm position can help to prevent pain, contractures, pressure problems and respiratory complications.

### 2. Size of problem

On average 10 out of 36 patients require good arm positioning. Almost 1/3 stroke ward patients.

### 3. Aim

All patients unable to independently move their Stroke hand to their mouth to have their arm positioned correctly whilst in bed.

### 4. Baseline Measure

5 point checklist scale (Yes/No) developed from SIGN management of stroke guidelines (2010).

### 5. PDSA Summary

**#5a** Plan: Identify the problem areas.

Do: Measure hourly for one day.

Study: 3 out of 5 points completed, with only 41% scored 100% (5/5)

Act: Purposeful education

**#5b** Plan: Assess effect of education.

Do: Repeat measure for a day.

Study: Even scoring across the 5 points. 3/5 points completed.

Patients stay in position up to 2hrs.

Act: Best Guide Poster above patients bed & in Newsletter.

**#5c** Plan: Assess effect of specialist cushions.

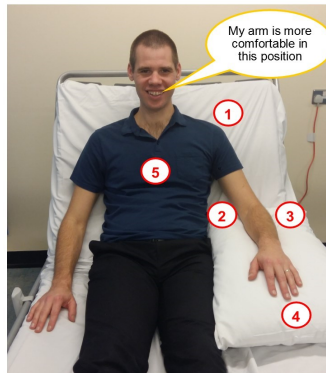
Do: Use blue specialist pillows for 1 week & measure.

Study: 2 part cushion too big, 1 part used. Improved average score 4.6/5

Act: Recommend similar specialist cushion.

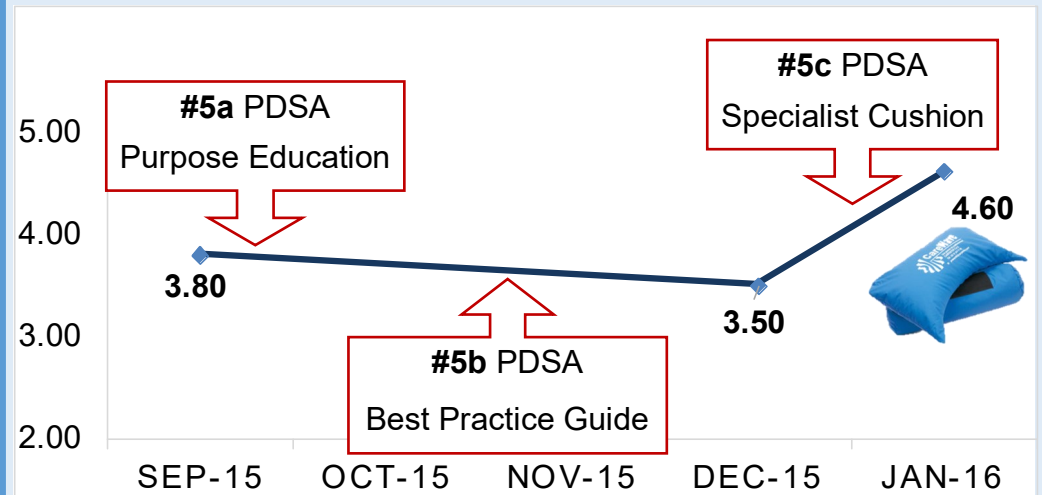
#### Best Practice to Positioning the Affected Arm

1. Affected **Shoulder** protracted
2. Affected **Shoulder** abducted (aligned with body)
3. Affected **Arm** brought forward
4. **Fingers** extended
5. **Trunk** straight and in midline



Reference: Scottish Intercollegiate Guidelines Network (SIGN) (2010). Management of Patients with Stroke: Rehabilitation, Prevention and Management of Complications and Discharge Planning Publication 118. Edinburgh: NHS Quality Improvement Scotland

### 6. Results / Run Chart (Average Total Score)



### 7. Summary

Staff more aware of good arm position, with each section evenly scored & 4 out of 5 points achieved. Specialist pillows might promote better positioning of the stroke arm.