

# The need for assessing reliability of quality development (QD) tools in structured self management education (SSME) programmes in diabetes

S Cradock<sup>1</sup>, B Stribling<sup>2</sup>, HM Dallosso<sup>2</sup>, H Daly<sup>2</sup>, ME Carey<sup>2</sup>, M Cullen<sup>3</sup>, MJ Davies<sup>4</sup>, H Eborall<sup>5</sup>, L Gray<sup>5</sup>, A Harding<sup>2</sup>, K Khunti<sup>5</sup>, L Martin Stacey<sup>2</sup>, M Stone<sup>5</sup>, C Taylor<sup>6</sup>, J Troughton<sup>2</sup>, T Yates<sup>2</sup>.

<sup>1</sup> Portsmouth Hospitals NHS Trust, Portsmouth, Hants, <sup>2</sup>Diabetes Research Team, University Hospitals of Leicester NHS Trust, Leicester  
<sup>3</sup> Dept of Nutrition and Dietetics, Glasgow South East, NHS Greater Glasgow and Clyde, Scotland <sup>4</sup> Department of Cardiovascular Sciences, University of Leicester, Leicester <sup>5</sup> Department of Health Sciences, University of Leicester, Leicester <sup>6</sup> Dietetic Department, Cumbria PCT, Whitehaven, Cumbria

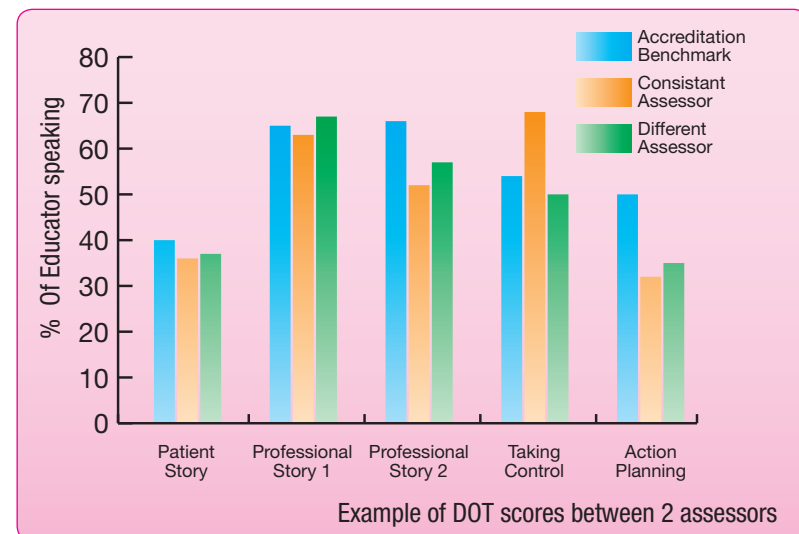
**Background:** NICE recommends that structured self management education programmes be reviewed by external assessors against agreed standards. The DESMOND Collaborative has a well-documented Quality Development process in place for educators. This includes an external visit from a trained assessor who reviews educator 'performance' using tools designed to measure against desired standards.

These tools are:

- DOS – an observation sheet using performance indicators derived from the curriculum to measure content and educator behaviours, and whether delivery is congruent with the underpinning theories and philosophy
- DOT – a measure of educator:participant interaction

**Aim:** To review current DESMOND QD tools when used by different trained assessors. We had already noticed some anecdotal differences and started a planned review of the DESMOND QD process. This study was the first step.

**Method:** 8 DESMOND newly diagnosed programmes were assessed (in real time) by 8 different assessors and 1 consistent assessor using the same QD tools designed to measure educator:participant interaction and delivery style including educator behaviours.



**Results:** Use of DOT, based on Flanders interaction analysis score, demonstrated 73% (24/33) of sessions scored consistent between the assessors. Variability as to whether they met the agreed criteria or not was identified in 27% (9/33) of sessions. 14% (12/84) of the content scores and 17% (14/82) of the educator behaviour scores were sufficiently different to result in a reclassification of the session observation.

Within these eight programmes, when broken down into sessions, there were noticeable variations between assessor scoring, although these were insufficient to change the outcome of potential accreditation.

These results highlight the importance of testing inter-rater reliability of assessors to assure standards in delivering structured self management education programmes.

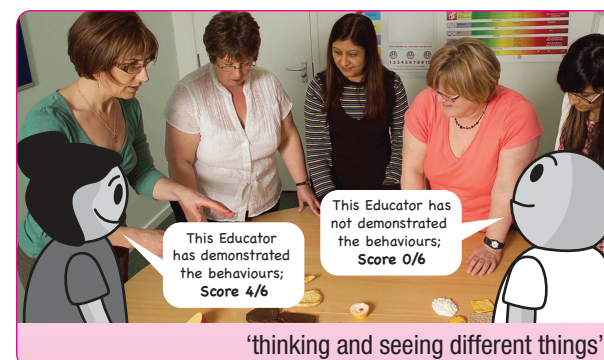
## Conclusions

Whilst the QD tools show some consistency between assessors there are sufficient differences that require further consideration for the development of the tools and training of assessors. Further research is needed to inform how the reliability and validity of assessments in such programmes can be improved.

**EDUCATOR QUALITY DEVELOPMENT PATHWAY**

**Assessor: Introduction and Homecoming**

**DESMOND Educator Pathway, DOS Sheet and DOT measure**



## What do we need to consider?

1. **How clearly are the educator behaviours described?** Is the difference due to lack of agreed understanding of the words used to describe the behavioural indicators or to differences in interpretation of the behaviours observed?
2. **Are the DOT recording tools accurate?** How can we support assessors to ensure their DOT timing tool is measuring 10 second intervals? Testing their CD/IPOD recording against a quality source of second timing?
3. **Are there issues around assessor concentration to undertake DOT and DOS?** Listening to the DOT signal as well as observing behaviours may be causing some challenges.