

## Individualized A1C targets versus A1C < 7% as a key performance indicator – Lessons learned from a tertiary diabetes center in Thailand

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**Objective :** Shortcomings of one-size-fits-all dichotomous A1C target had been addressed in various diabetes guidelines. However, performance measurement data are very limited to document the impact of A1C goal achievement through individualized A1C targets. The aim of this study was to comparison the rate of goal achievement with individualized A1C targets versus A1C <7%.

**Materials and Methods :** Individualized A1C target values were set as a part of annual quality improvement program at Theptarin Hospital, a multidisciplinary based diabetes center in Bangkok. A total of 400 randomly selected type 2 diabetes patients medical records were audited and the rate of goal achievement with individualized A1C targets versus A1C <7% was examined.

**Results :** Individualized A1C target values of <6.0%, <6.5%, <7.0%, <7.5%, <8.0%, <8.5, <9 and <9.5% were set in 0.3%, 11.0%, 62.7%, 14.7%, 9.0%, 1.2%, 0.7 and 0.3% of patients, respectively. While 53.5% of the patients achieved an A1C level of <7%, 60.8% of the patients achieved the individualized A1C goal. The patients who failed to achieve the individualized goal showed higher rate of insulin usage in comparison to those who achieved the goal.

**Conclusions :** The application of individualized A1C targets resulted in an achievement rate that was 7.3% higher in comparison to a target A1C level of <7%. These results highlight that physicians should document an individualized glycemic treatment goal and periodic evaluation should be done based on the updating individualized A1C goals to prevent over-treatment or under-treatment in diversified diabetic patients.