

The Clinical Effectiveness and Cost Effectiveness of Bariatric Metabolic Surgery for Obese with Poorly Controlled Type 2 Diabetes Patients In Malaysia - A Study Protocol

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Objectives: Bariatric Surgery is a major breakthrough in diabetes care. Complete remission is attainable in a great percentage of patients. However, there is slow progress in this procedure in Malaysia. With the overwhelming rate of obesity and diabetes in the country, the potential advantage of this treatment modality is underestimated. Conventional diabetes care only controls 22% of the diabetics and healthcare expenditure has ballooned due to complications costs amounting to at least RM 2 billion in a year eating up 10% of the government's budget on healthcare. Furthermore, this burden will increase in the next decades as diabetes is predicted to increase by 69% by 2030. While this procedure is beneficial, it is an expensive intervention with risks of complications. This raises the question of whether bariatric surgery is cost-effective in the context of this country? Evidence must be available to decision-

makers weighing the risk-benefit ratio of the procedure. This study aims to assess the clinical effectiveness and cost-effectiveness of bariatric surgery in managing obesity among the Malaysian population. It will specifically investigate the short term and long-term effects of the procedure investigating anthropometric and metabolic disease blood indicator changes while assessing direct, indirect costs, QALYs gained and complications associated with the procedure.

Methods: We will review charts of all patients who have undergone bariatric surgery procedures from 2014 to 2016 in HUKM, Department of Surgery and in Andrea Bariatric Surgery Clinic. We will look at their weight, BMI, and some blood parameter results before and after surgery one-year post-surgery for the short-term effect and 3–5 years post-surgery for the long-term effect. We will also assess the mortality risks and complications of the procedures. **Study Population:** All patients who underwent Bariatric Surgery procedures from 2014–2016 in HUKM and in Andrea Bariatric Surgery Clinic **Study Site/Location:** HUKM, Department of Surgery & Andrea Bariatric Surgery Clinic

Results: N/A - Study Protocol

Conclusions: The result of this study can contribute to the decision making of patients, doctors, and Health Insurance Companies in Malaysia

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