1) Preoperative recommendations:

Prehabilitation:

This is the process of enhancing an individual's functional capacity to enable them to withstand a forthcoming stressor, e.g. major surgery.[8-11]

This important concept is beyond the scope and focus of these guidelines and there is agreement that this will be difficult to implement universally in our local context.

There are broad principles and specific interventions agreed upon that are supported by the highest level of evidence and by expert consensus. Where the evidence is lacking, these are very unlikely to cause harm.[8-11]

These include, but are not limited to:

1) Timeous preoperative assessment by multidisciplinary teams where possible and appropriate.[4]
2) Preoperative individualised patient education. This should take into account the varying physical, psychological and social needs of a diverse group of patients. [4]
3) Preoperative cessation of smoking. [4]
4) Reduction in alcohol consumption prior to surgery. [4]
5) Increase in preoperative activity level where feasible. [4]
6) Optimisation of medical conditions and measured parameters e.g., control of hypertension, reduction in measured HbA1c level in diabetic patients, correction of preoperative anaemia.[4]

Clinicians are encouraged to incorporate as many interventions as are possible, prior to arthroplasty surgery. [4]

The immediate preoperative period commonly causes anxiety for patients and counselling regarding the surgical and anaesthetic plan should include information for realistic expectations post-operatively. [4]

Recommendations on the day of surgery:

1) Avoid routine anxiolysis with benzodiazepines or premedication with gabapentinoids.[1, 12] The impact of preoperative anxiety should not be underestimated however, and if deemed in the best interests of the patient should be provided.
2) Reduce fasting times in keeping with the latest guidelines on preoperative starvation. [13]

3) Most patients presenting for major lower limb arthroplasty should have a preoperative full blood count and baseline urea and electrolytes. [48] The requirement for preoperative tests should be guided by patient comorbidities.[48]
4) Preoperative cognitive assessment e.g. Mini-cog assessment © in elderly patients, >65 years of age.[45, 46, 47, 49]
5) Pre-emptive administration of paracetamol and non-steroidal anti-inflammatories can commence prior to the surgery [3, 4, 6]