

# PERI-OPERATIVE PHARMACY SERVICES AND THE ENHANCED RECOVERY PATHWAY

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# **DISCLOSURE STATEMENT**

***"Conflict of interest: nothing to disclose"***

# SELF ASSESSMENT QUESTIONS

1. Pharmacy teams do not add any value to enhanced recovery pathways pre-operatively  
**True / False**
2. The main goal of enhanced recovery pathways is to get patients out of hospital as quickly as possible  
**True / False**
3. Enhanced recovery pathways only apply to elective surgical procedures  
**True / False**

# SESSION OBJECTIVES

- Recognise the importance of management of long-term conditions in surgical patients and the important contribution pharmacists can make
- Understand possible interventions to optimise patients for elective surgery and post-operatively
- Appreciate the role of the wider MDT team throughout the enhanced recovery pathway.

**Does your organisation run a  
Pharmacist led pre-assessment clinic?**



# PRE-OP ASSESSMENT

- Important that assessment and preparation start early
- Primary care physicians can play a major role in identifying causes of increased morbidity e.g. anaemia, cardio-vascular risk factors including hypertension, obesity and smoking along with low levels of physical fitness
- Pre-assessment clinics (nurse, anaesthetist and pharmacist led) also crucial in identifying 'high-risk' patients

# ENHANCED RECOVERY (ER)

**NHS**

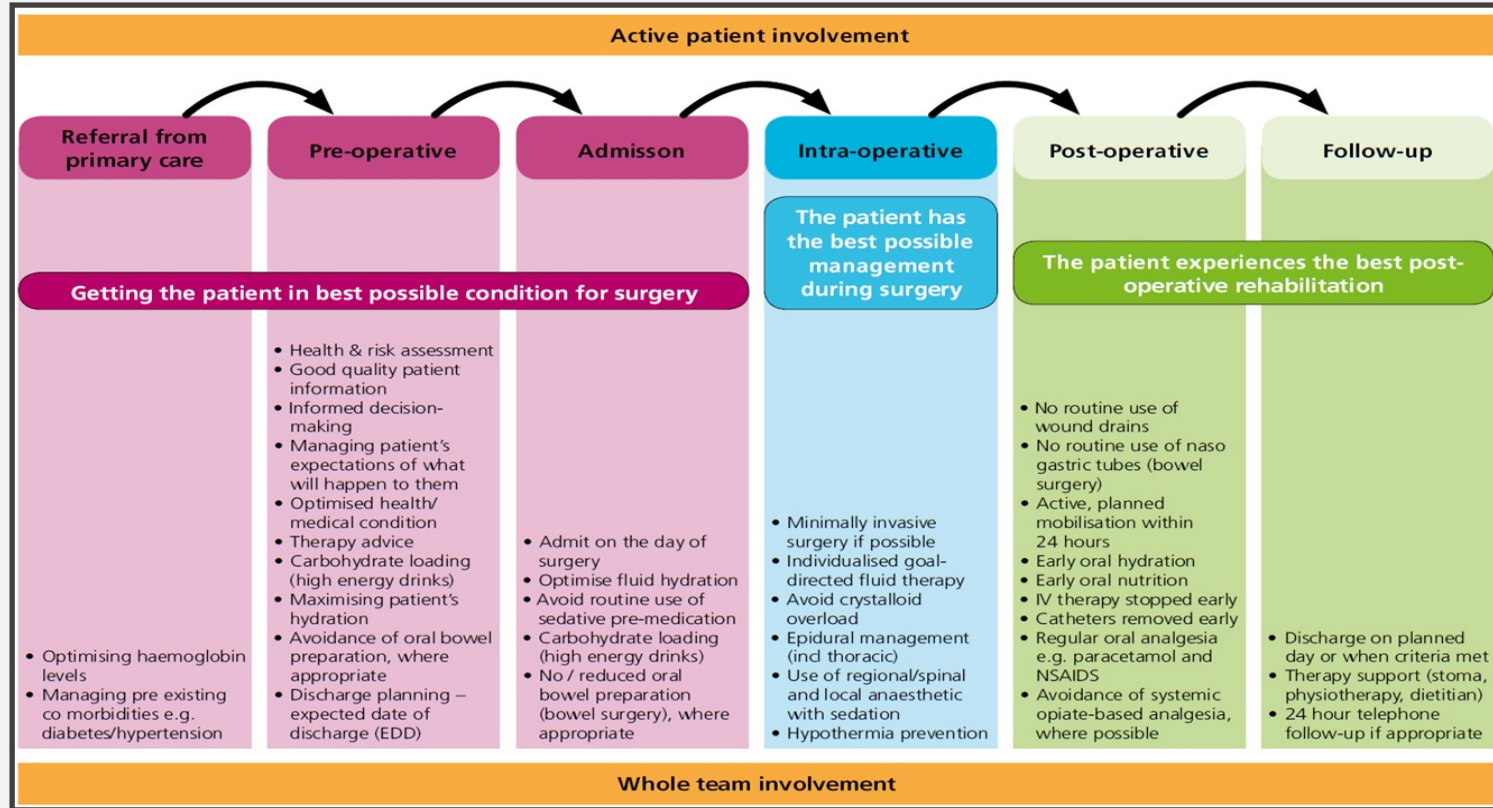
*Enhanced Recovery  
Partnership Programme*

## Delivering enhanced recovery

Helping patients  
to get better sooner  
after surgery

- Evidence based approach to pre-operative, intra-operative and post-operative care
- Reduction in length of stay from 8-12 days to 2-5 days
- Reduced morbidity and mortality, convalescence and overall cost
- **General principles can be transferred to any specialty.**

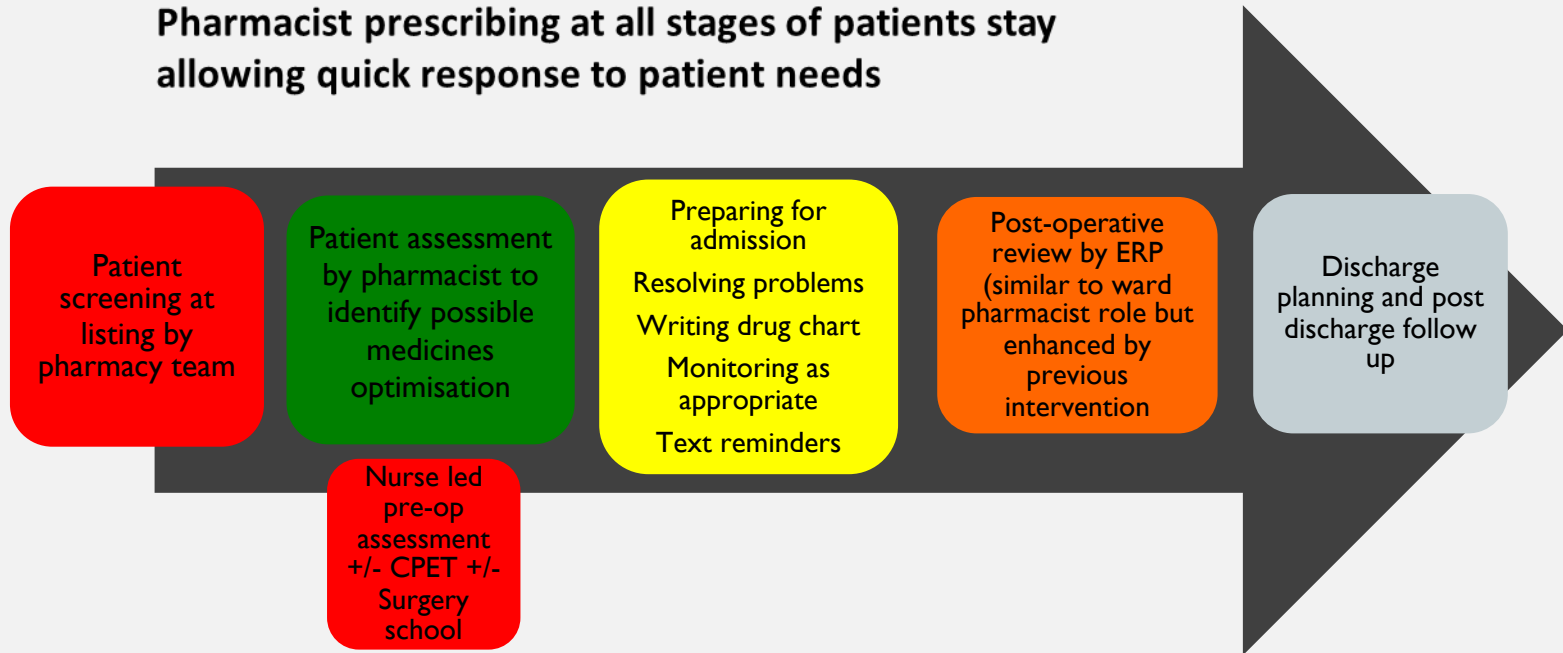
# ENHANCED RECOVERY PATHWAY





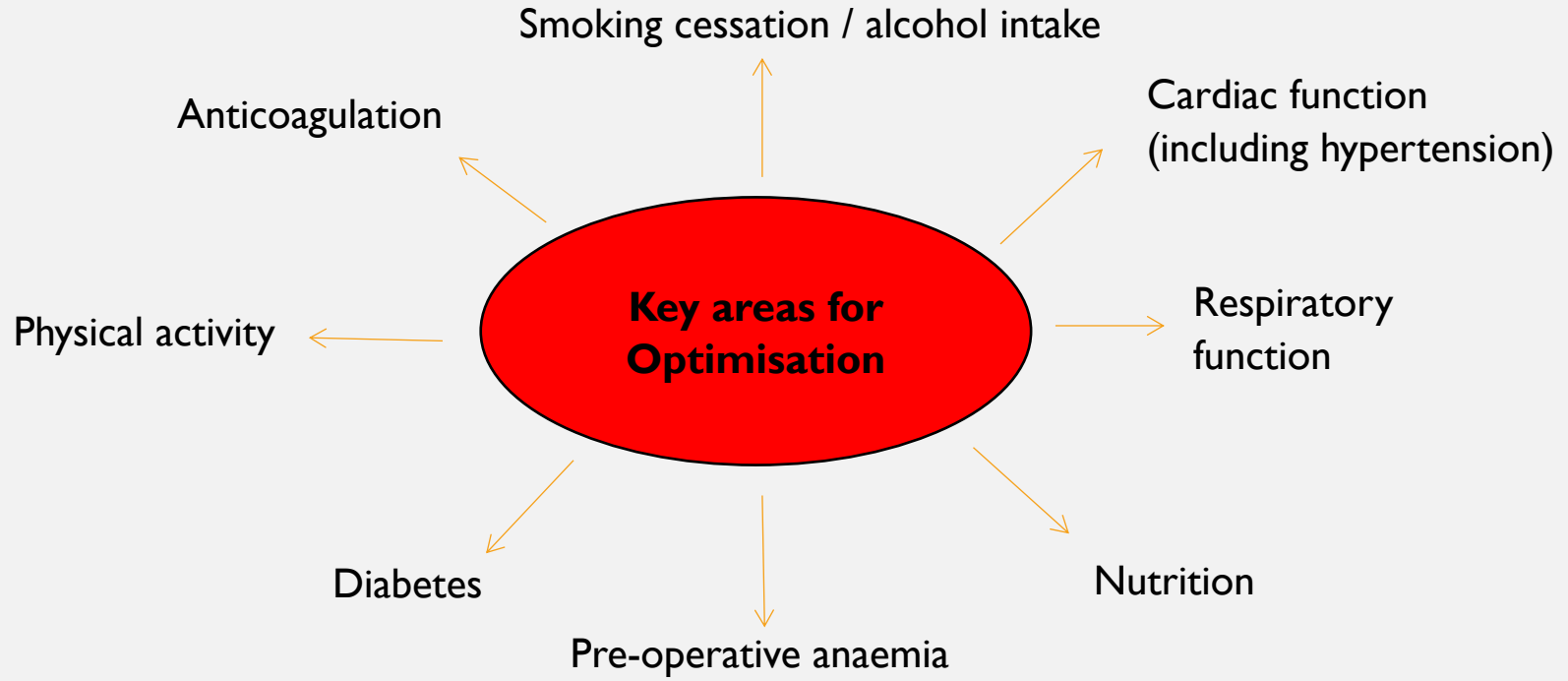
# IMPLEMENTATION OF ER PHARMACIST SERVICE: AN EXAMPLE FROM THE UK

Pharmacist prescribing at all stages of patients stay  
allowing quick response to patient needs

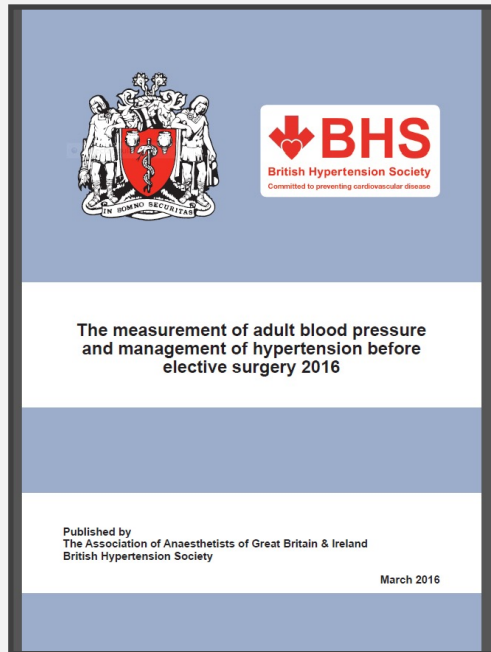


**FOCUS ON MEDICINES OPTIMISATION THROUGHOUT SURGICAL JOURNEY**

# PREPARATION FOR SURGERY

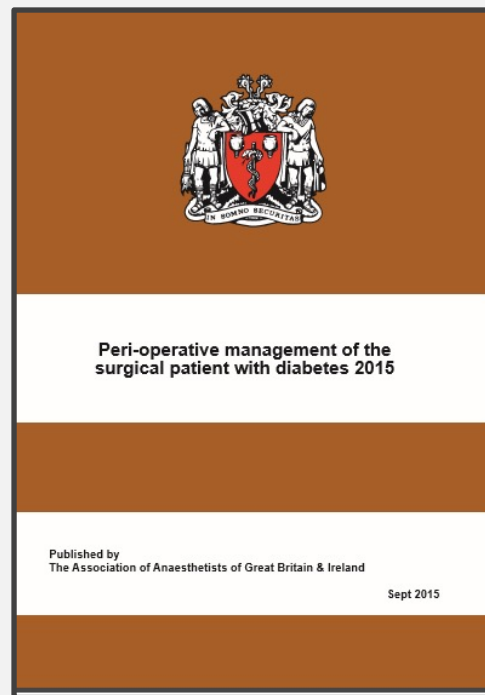
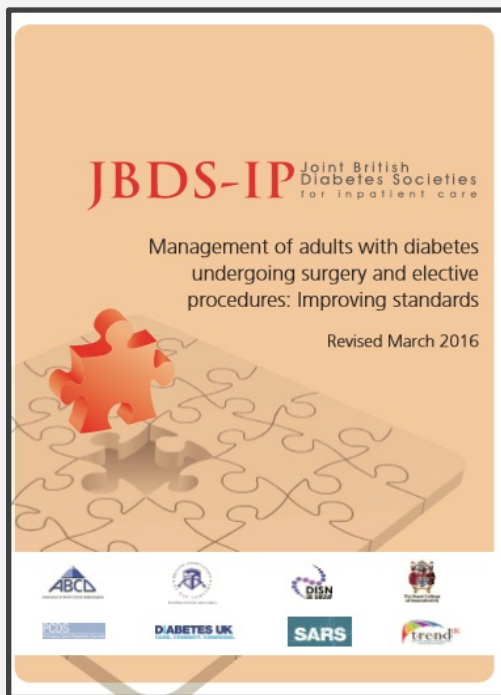


# OPTIMISING CARDIAC FUNCTION



- Aim to ensure BP < 160/100mmHg prior to elective surgery
- BP > 170/110mmHg associated with increased cardiovascular complication risk
- NICE / BHS guidance
- In patients with acutely decompensated heart failure (NYHA class IV), surgery should be postponed if possible.

# OPTIMISING DIABETES CONTROL



# IMPORTANCE OF GLYCAEMIC CONTROL

- Diabetes is the most common metabolic disorder
- Currently affects nearly 10% of people in the UK; predicted to increase over the next decade by more than 50% of population
- Surgical patients - excess bed days 45% greater than for people with diabetes admitted to medical wards
- Peri-operative mortality rate for people with diabetes > 50% higher than non-diabetic population
- Peri-operative hyperglycaemia in the surgical patient is associated with increased rates of infection (surgical site and systemic), AKI, ACS and acute CVA's
- Diabetic ketoacidosis still occurs on surgical wards (in 1 in 25 patients with type 1 diabetes).

# OPTIMISING PRE-EXISTING ANAEMIA


Guideline |  Free Access

## British Committee for Standards in Haematology Guidelines on the Identification and Management of Pre-Operative Anaemia

 Correction(s) for this article 

Alwyn Kotzé, Andrea Harris, Charles Baker, Tariq Iqbal, Nick Lavies, Toby Richards, Kate Ryan, Craig Taylor, Dafydd Thomas

First published: 06 September 2015 | <https://doi.org/10.1111/bjh.13623> | Cited by: 35

 Correspondence: BCSH Secretary, British Society for Haematology, 100 White Lion Street, London N1 9PF, UK. E-mail: [bcsh@b-s-h.org.uk](mailto:bcsh@b-s-h.org.uk)

 SECTIONS

 PDF  TOOLS  SHARE

### Background

Anaemia is most often defined in terms of the criteria established by the World Health Organization (WHO) in 1968 (WHO [2011](#)), namely haemoglobin (Hb) concentration of <130 g/l for men and <120 g/l for women. Pre-operative anaemia is common. Its prevalence varies from 5% to 75% depending on the population studied (Shander *et al*, [2004](#)).

- NICE guidance on blood transfusions issued November 2015
- Use of tranexamic acid intra-operative if blood loss > 500mls

# ANTICOAGULATION MANAGEMENT

## PERI-OPERATIVE MANAGEMENT OF ANTICOAGULATION AND ANTIPLATELET THERAPY

A British Society for Haematology Guideline

David Keeling<sup>1</sup>, R Campbell Tait<sup>2</sup>, Henry Watson<sup>3</sup>.

<sup>1</sup>Oxford University Hospitals NHS Foundation Trust, Oxford, UK, <sup>2</sup>Glasgow Royal

Infirmery, Glasgow, UK, <sup>3</sup>Aberdeen Royal Infirmery, Aberdeen, UK.

- When to consider bridging treatment
- Management of DOAC's

# OPTIMISING RESPIRATORY FUNCTION

- Asthma has prevalence of between 10 and 15% in developed countries
- Low incidence of peri-operative bronchospasm in asthmatic patients (1.7%)
- Patients with symptomatic asthma should have their treatment increased until symptom control is achieved
- For patients with COPD postponement of surgery after or during a recent exacerbation is advisable
- Encourage smoking cessation.



# TAKE HOME MESSAGES

- Preoperative optimisation is essential for high quality care and enhanced recovery
- Pharmacists can play a key role in enhanced recovery pathways with focus on medicines optimisation throughout the surgical journey
- **Optimisation is for life, not just for surgery!**

# PUBLICATIONS

- **Bansal N**, Tai WT, Chen LC (2019). Implementation of an innovative surgical pharmacy service to improve patient outcomes – twelve-month outcomes of the Enhanced Surgical Medicines Optimisation Service. Journal of Clinical Pharmacy and Therapeutics. Available online at: <https://onlinelibrary.wiley.com/doi/10.1111/jcpt.13014> 27/08/2019
- **Bansal N**, Morris J (2019). Pharmacist involvement in Elective Enhanced Recovery Pathways to improve patient outcomes in Lower Gastrointestinal Surgery. A Prospective before and after Study. International Journal of Clinical Pharmacy. Available online at <https://doi.org/10.1007/s11096-019-00888-2>

# Any Questions?

