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Reducing the incidence and severity of acute kidney Injury in people with ileostomies – a nurse-led approach in a district general hospital in the United Kingdom

The Royal Wolverhampton NHS Trust

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INTRODUCTION

Having an ileostomy is an independent risk factor for the development of acute kidney injury (AKI) due to the increased risk of dehydration. Up to 31% of patients will develop a high output ileostomy (HOI) at some point (1) ,up to 38% of which will require hospital admission (2). 25% will develop chronic kidney disease within two years of stoma formation (3)

AIM

A nurse-led initiative was developed which aimed to **reduce** both the **incidence** and **severity of AKI** in people with ileostomies, through collaboration with clinicians working across the medical-surgical spectrum as well as with patients and their families.

METHOD

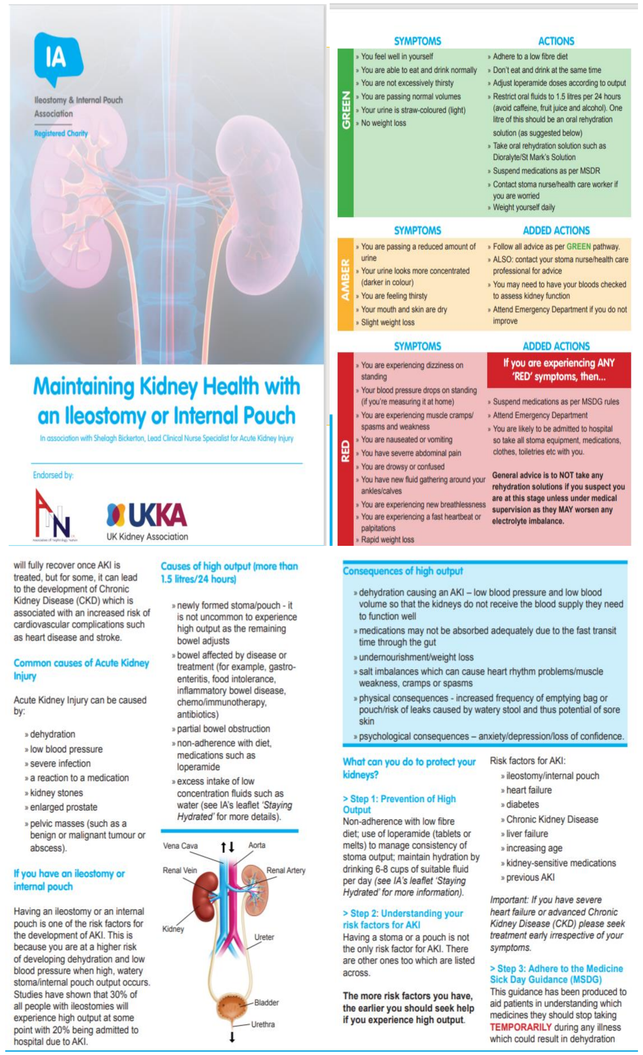
- Development of an **assessment tool** for Colorectal Nurse Specialists to triage patients for intervention in the event of HOI (as they are often the first point of contact).
- Improving in-patient care for patients with HOI by **extending current national guidelines** to include renal-protective strategies.
- Development of a **patient information leaflet** to improve knowledge and self-management of stoma output and strategies to foster kidney health.

RESULTS

- The **assessment tool** used by colorectal nurses is now being used in at least **five** different trusts across the UK. Feedback has shown that it is improving consistency and clinical confidence, by providing a framework to support clinical judgment.
- The **extended in-patient guidelines** to manage HOI have been divided into sections; care in the first 24hrs, care whilst being an in-patient and follow-up care post discharge. This has standardised care across the trust, ensuring consistency of approach irrespective of specialty of ward.
- The **patient information leaflet** has been adopted by the Ileostomy Association and has been officially endorsed by the UK Kidney Association and Association of Nephrology Nurses, UK. It is distributed widely across the UK

Data from Jan –Dec 2024

- Reduction in incidence of AKI by **16.1%**
- Length of stay reduced by **2.65%**
- Readmission with AKI <90 days post discharge reduced by **4.6%**
- Improvement in renal recovery by 90 day by **6.4%**



CONCLUSIONS

- A comprehensive, three-pronged approach has been shown to **improve outcomes** for this cohort of patients.
- **Working collaboratively** across the medical-surgical fields ensures holistic, consistent care resulting in improved clinician confidence and competence, and reduced length of stay, readmission rates and morbidity for patients..
- A **standardised assessment tool** can support clinical judgment to ensure patients receive appropriate, timely intervention.
- **Supporting and educating patients** can foster independence and help to allay some of the physical and psychological issues related to having a stoma.

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