

Introducing Acute Kidney Injury alerts and electronic fluids prescribing systems in a hospital setting to improve patient outcomes.

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Important points about Acute Kidney Injury

- AKI affects 1 in 5 patient admitted to hospital as an emergency.
- AKI is associated with poorer patient outcomes and predisposes to Chronic Kidney Disease.
- In UK only 50% of patients who died from AKI had received good care.
- 30% of AKI-related deaths could be prevented with the right treatment and care.
- Cost to NHS is more than 1 billion pounds per year.

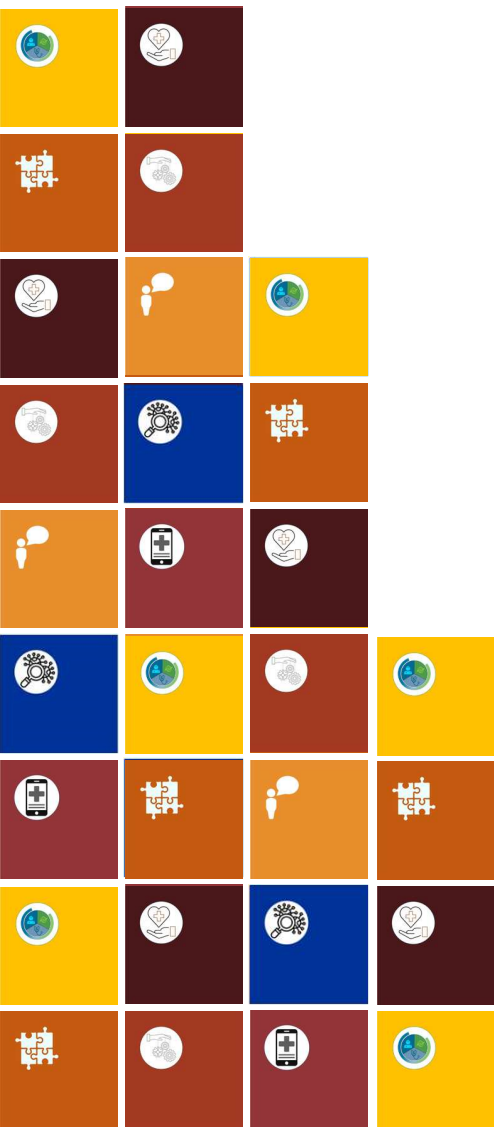
About the Princess Alexandra Hospital

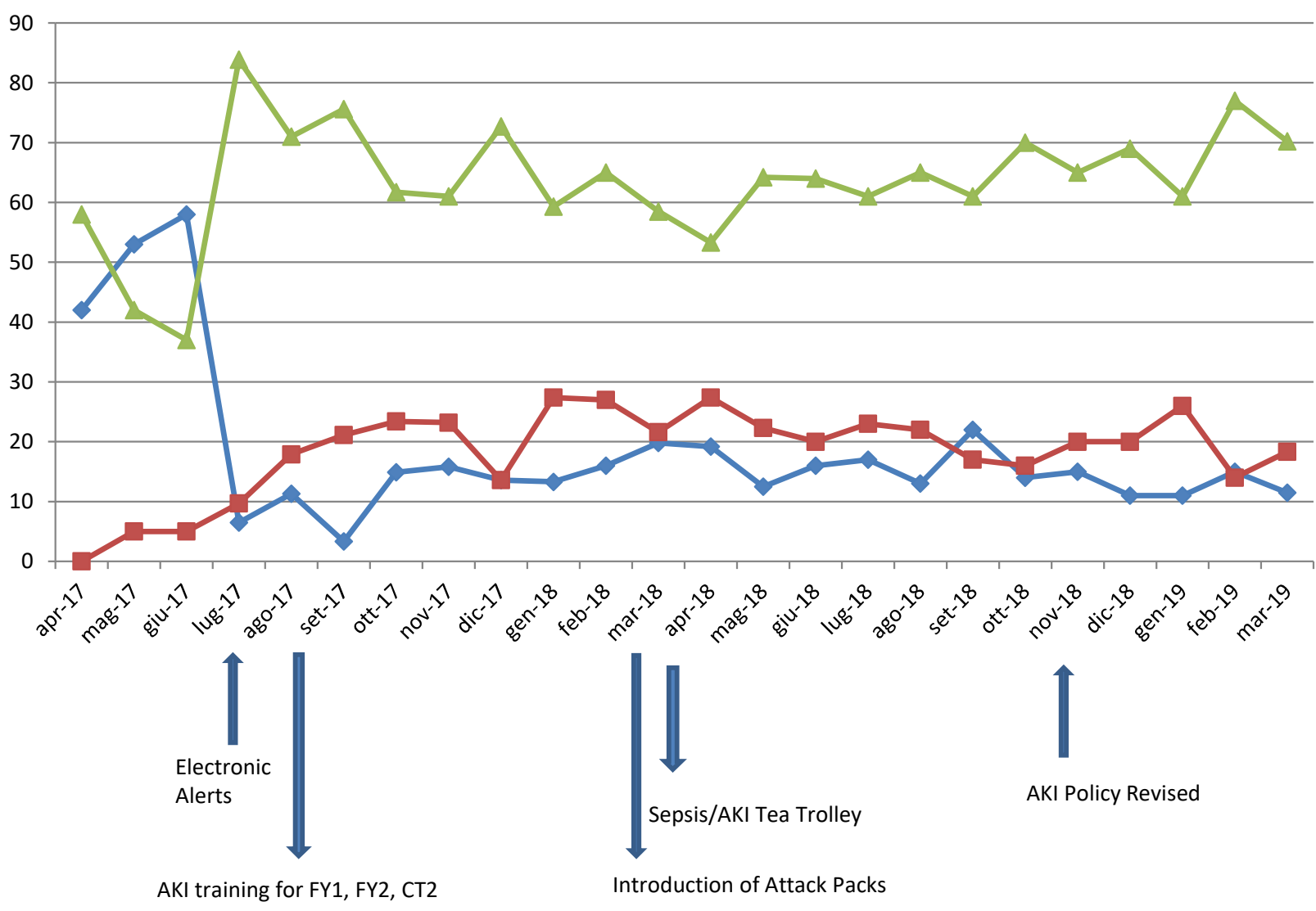


- Only 22% of our patients correctly received IV fluids as prescribed.
- 17 more deaths from AKI than national average (Aug 18-July 19).
- Introduction of new hospital protocol of AKI alerts and electronic fluid prescribing.
- Average time for an alert to be recorded in the patient notes was 27 hours.
- Ward notification by laboratory for AKI Stage 2 & 3 and AKI alert sticker introduced.

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Introduction of electronic AKI alerts





78% reduction in patients experiencing an increase in their AKI alerts (reduced from 58% to 13%).

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Electronic Alerts

AKI training for FY1, FY2, CT2

Sepsis/AKI Tea Trolley

Introduction of Attack Packs

AKI Policy Revised

Introduction of electronic fluid prescribing

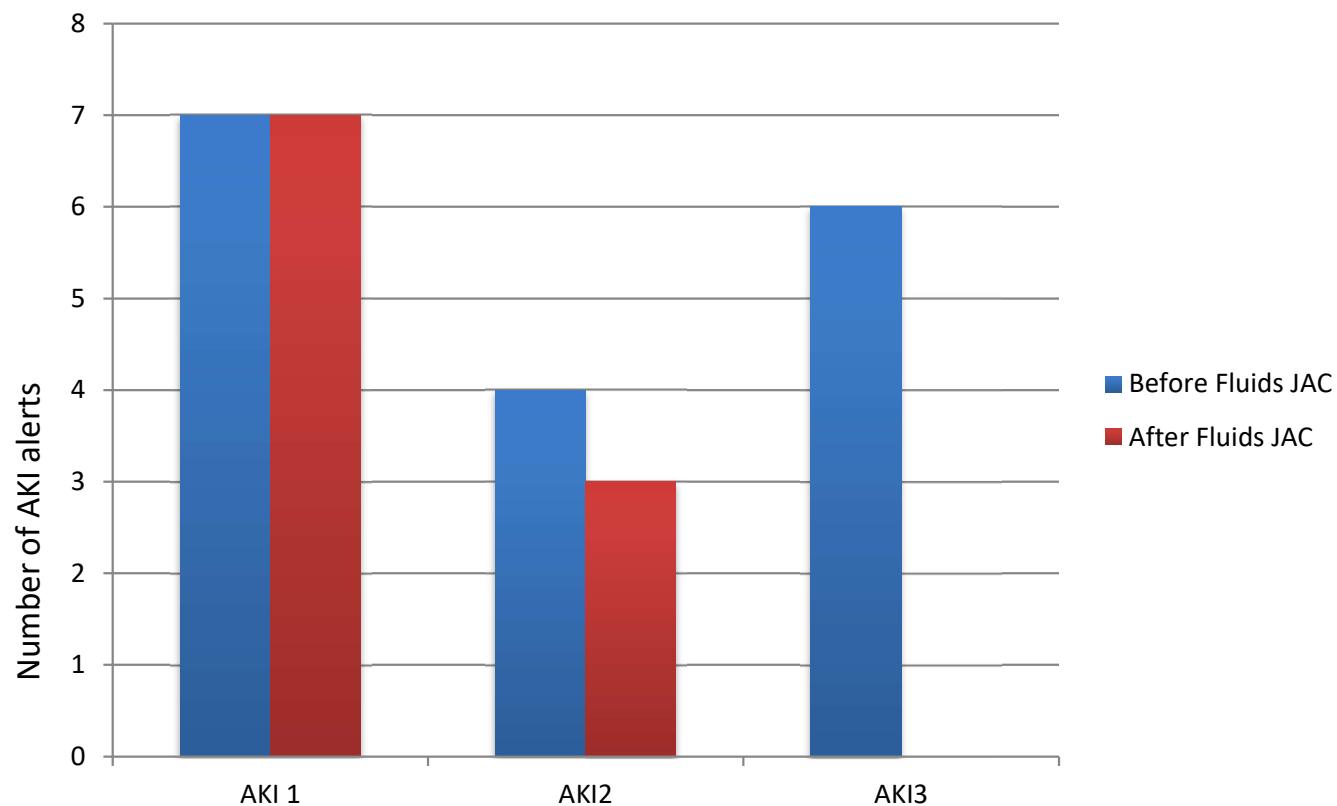
In the first week there was a **13% reduction** in overall hospital AKI alerts from 226 to 197, compared to the same week of the preceding year.

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Gastroenterology ward pilot study- Electronic Fluid Prescribing

- Monitored numbers of AKI alerts for 2 weeks before and after electronic fluid prescribing.
- 41% reduction in number of AKI alerts (from 17 to 10).
- 50% reduction in number of patients who generated AKI alerts (from 12 to 6).
- 50% reduction in number of patients who generated multiple alerts (from 4 to 2).

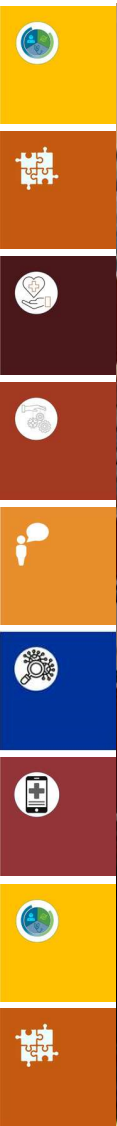
AKI alerts according to AKI Staging



- No change in AKI stage 1 alerts.
- 25% reduction of AKI stage 2 alerts.
- 100% reduction of AKI stage 3 alerts.
- Overall reduction in AKI alerts by 41%.

Key points

- AKI is a medical emergency with high associated morbidity/mortality and financial costs.
- Introduction of electronic AKI alerts led to a significant reduction of patients experiencing an increase in AKI alerts.
- electronic fluids prescribing is more effective than paper fluids chart prescribing in reducing the number of AKI alerts and improving patient outcomes.
- Next step is a larger study on impact of electronic fluid prescribing, involving more wards of various specialties.



Thank you!

Any questions?

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