



# Achieving Sepsis Goals: The Effect of a Sepsis Quality Improvement Programme

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## Introduction

The National Sepsis Programme aims to reduce mortality and decrease healthcare usage from sepsis. The availability and intelligent use of high quality data on sepsis incidence in acute hospitals is essential for achieving these goals.

The **Healthcare Pricing Office (HPO)** and the **Quality Improvement Division** have been working in collaboration with the **National Sepsis Programme** to improve the quality, coverage and analysis of Hospital Inpatient Enquiry (HIPE) data of patients with sepsis.



The aim of the **National Sepsis Programme** is to decrease the sepsis associated hospital mortality rate by 20% over 5 years & to decrease critical care admissions and hospital length of stay by 10%.



The HPO manages the HIPE system providing support to hospitals including the development and support of the **data collection** and reporting software, **training of coders** and monitoring and supporting **data quality audit** and reporting. HIPE collects information on discharges from all acute public hospitals nationally reporting on over 1.6 million records annually. **Collaboration with clinicians** is central to the work of the HPO ensuring HIPE data truly represent the patient's hospital journey.



The **Quality Improvement Division** works in partnership with patients, families and all who work in the health system to improve the quality and safety of care. **Measurement for Quality** is one of the six key drivers of the Framework for Improving Quality in our Health Service.

## Methods

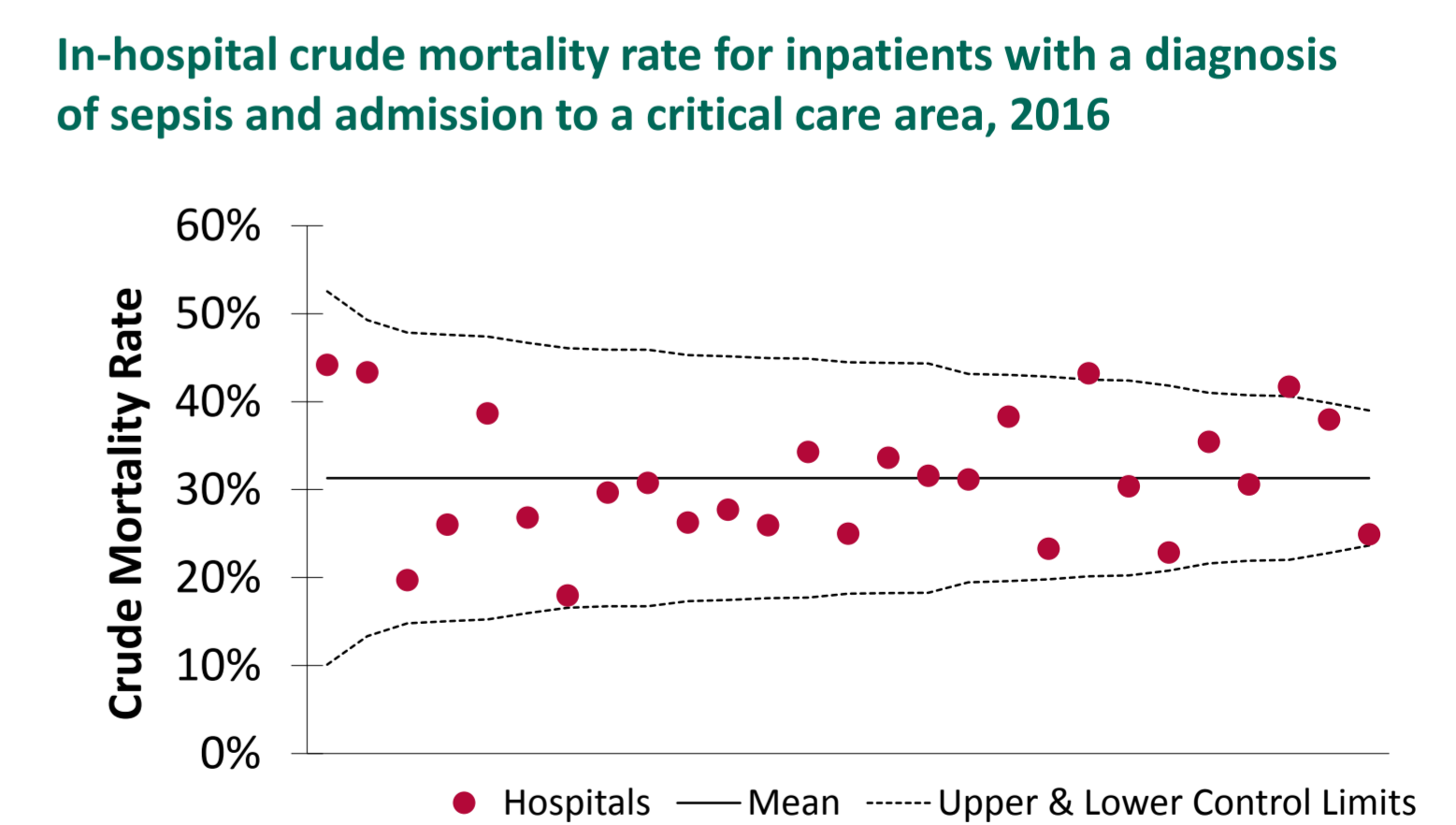
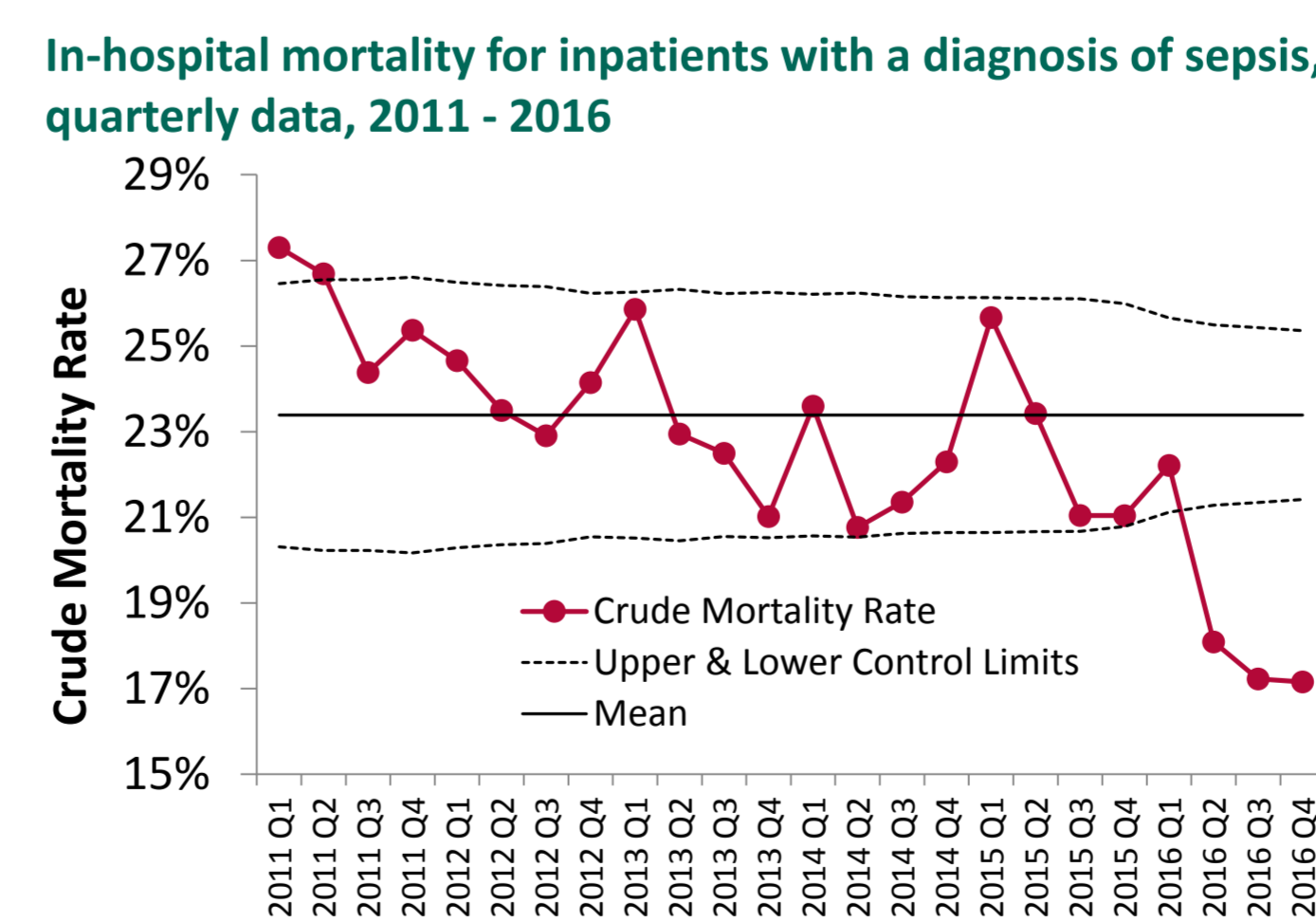
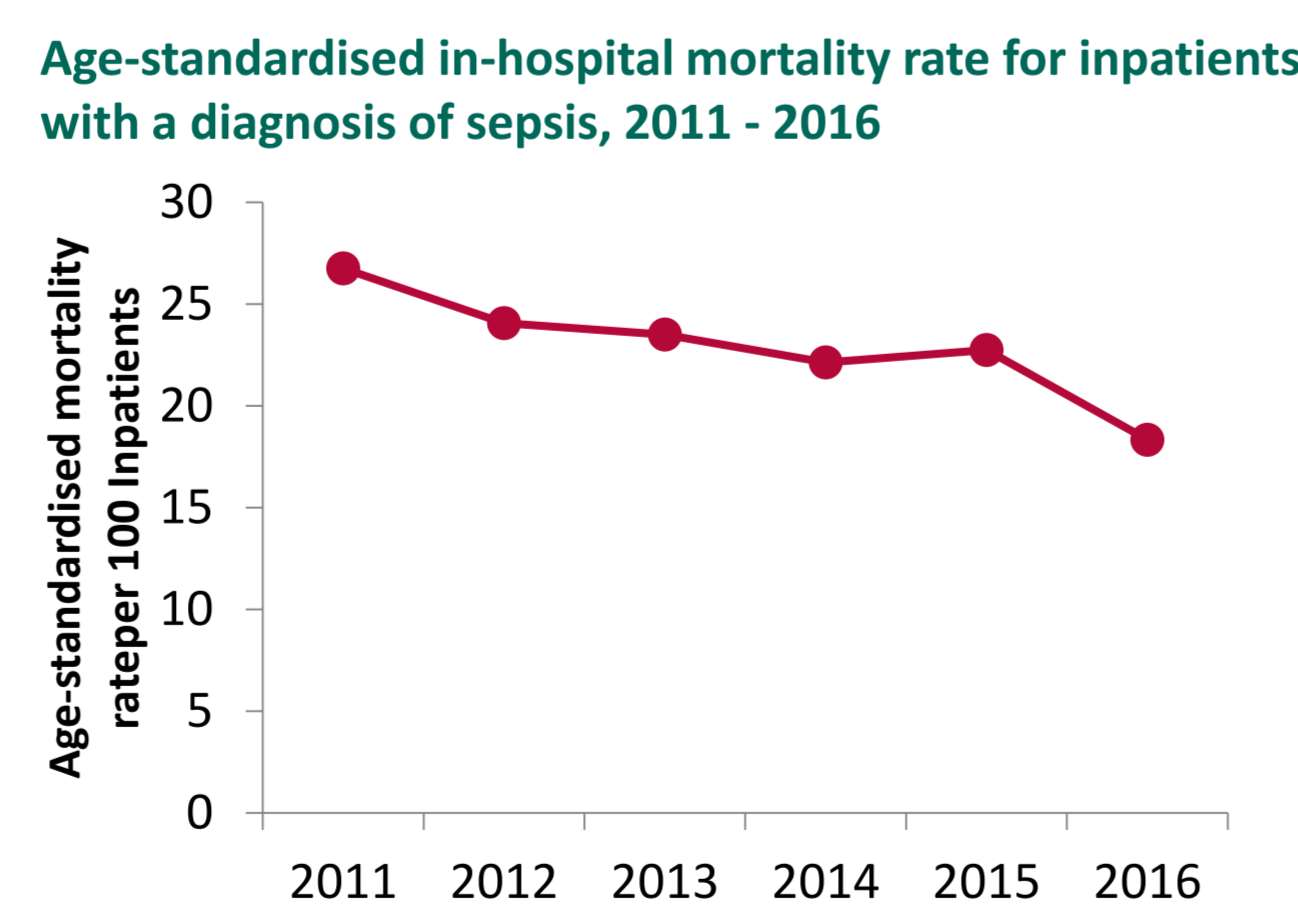
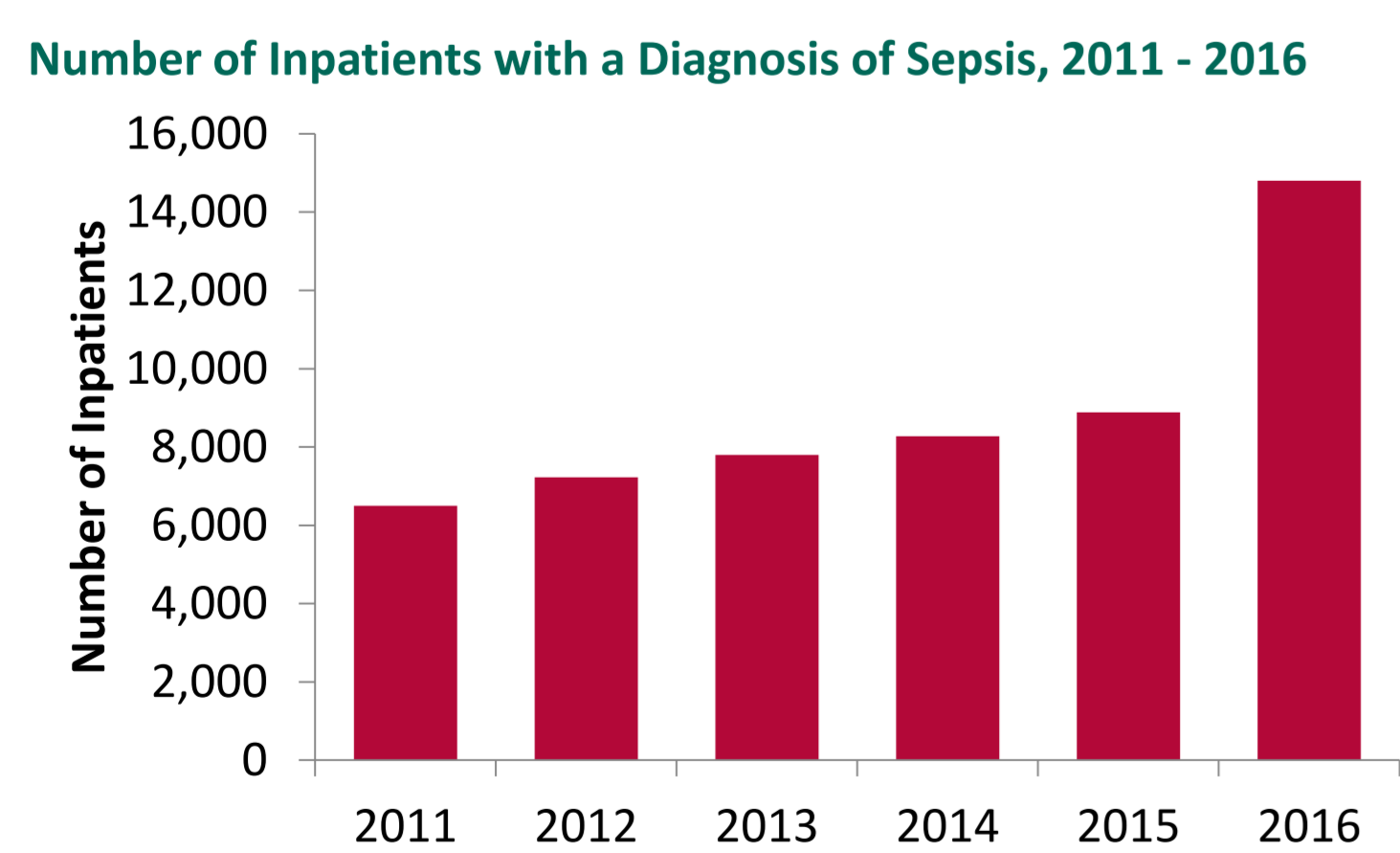
Through collaboration with the National Sepsis Lead and her team, the HIPE team at the HPO ran a series of 7 workshops with 250 attendees nationally to ensure that all coders across all specialities and hospitals were given information on both the clinical and classification aspects of sepsis.



In addition, HIPE data related to patients with sepsis and infections have been analysed using the principles of Measurement for Improvement, including statistical process control charts showing the trends in mortality rates over time, and funnel plots showing variation among hospitals.

## Benefits & Outcomes

The education programme and collaborative steps taken by the National Sepsis Programme and the HPO have raised awareness of the reporting and coding of sepsis amongst both the clinical and coding communities, resulting in a substantial increase in the numbers of sepsis cases reported in HIPE in 2016 compared to 2015 (14,804 in 2016: an increase of 67% since 2015).



The analysis of data using the principles of Measurement for Improvement has enhanced the understanding of trends and variation in sepsis mortality and morbidity, and has provided evidence of improvements.

Importantly in addition, there has been a reduction in the in-hospital mortality rate for patients with a diagnosis of sepsis from 26.0% in 2011 to 18.5% in 2016.

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