

# Measuring the Quality of Hospital Inpatient Care

Using 'all or none' compliance with multiple processes prompted by clinical pathways

CLINICAL RISK MANAGEMENT UNIT, WIMMERA HEALTH CARE GROUP

Sally Taylor, Clinical Risk Manager (Sally.Taylor@whcg.org.au)

Alicia McGrath, Clinical Pathways Coordinator

Alan Wolff, Director of Medical Services

## INTRODUCTION

Process indicators are a sensitive measure of the quality of patient care. A system using checklists and reminders for process indicators incorporated into clinical pathways was introduced to Wimmera Health Care Group in 2000 to reduce care variation and adverse events.

An "all or none measurement" approach for compliance with process indicators has previously been advocated by Nolan and Berwick<sup>1</sup>. In many clinical conditions achieving the best outcome requires completion of all processes. Many hospitals now achieve more than 90% compliance with individual process indicators. However "all or none measurement" provides greater precision in measuring improvements.

## METHODOLOGY

Key process indicators have been continuously measured for nine years in both STEMI and stroke patients. Significant improvements were found in an initial study<sup>2</sup> and have been sustained. However, what proportion of patients have received all the processes of care being measured?

Process indicators chosen for the STEMI patient group were based on Safer Systems Saving Lives acute myocardial infarction discharge medication care components. Process indicators for the stroke patient group were based on National Stroke Foundation guidelines.

## KEY FACTORS FOR SUCCESS OF CLINICAL PATHWAYS

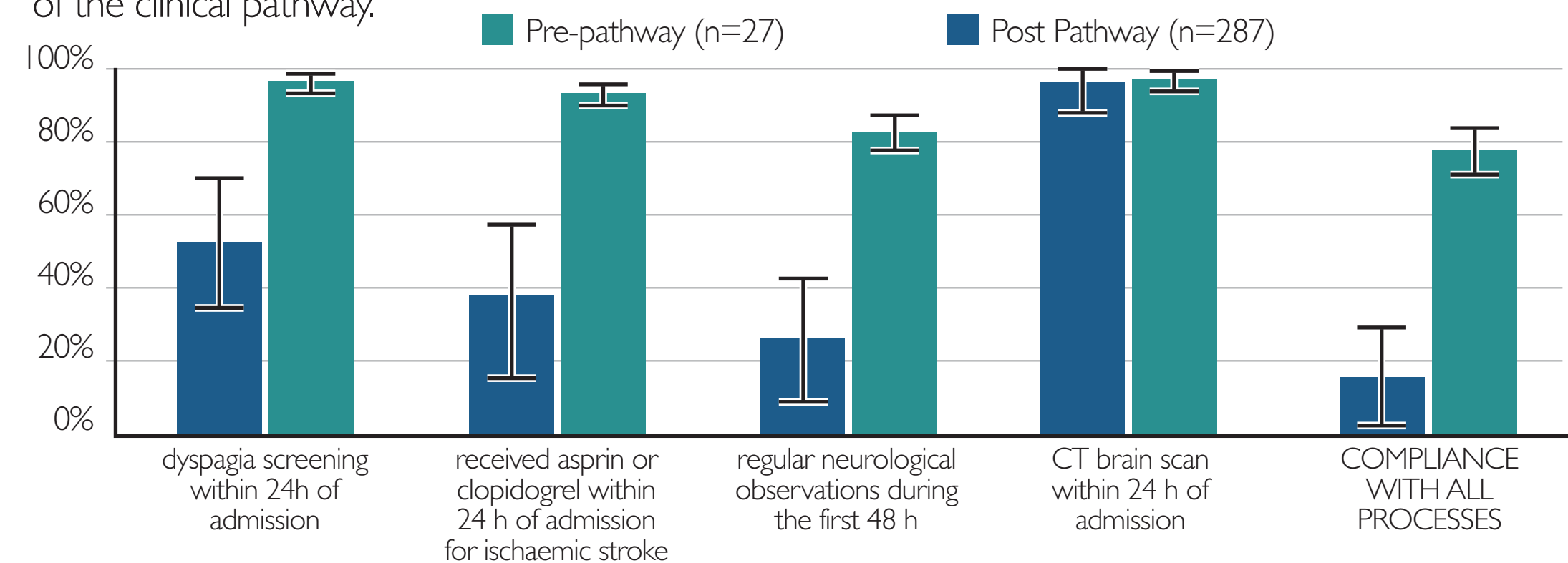
- Clinical pathways incorporated into patient medical record and completed by all clinical staff providing care.
- Each process of care detailed in pathway and provided as checklists and reminders.
- Established clinical risk management culture in hospital.
- Funding allowing program coordination and staff participation in teams to be paid for additional work or replaced in their normal duties.
- Clinical pathways developed by multidisciplinary teams improving communication and team work between health professionals from different clinical disciplines and providing ownership of each pathway.
- Literature review to determine best clinical practice for each pathway and this evidence adapted for local conditions prior to incorporation into pathway.
- Medical staff involved early and invited to comment on individual pathways before implementation.
- Clinical and executive champions steer pathway program through the hospital's clinical and administrative systems. Board of Management champions support program at hospital's peak quality committee and board level.
- Results fed back regularly to all clinical staff, major clinical groups and appropriate hospital committees.

## CONCLUSION

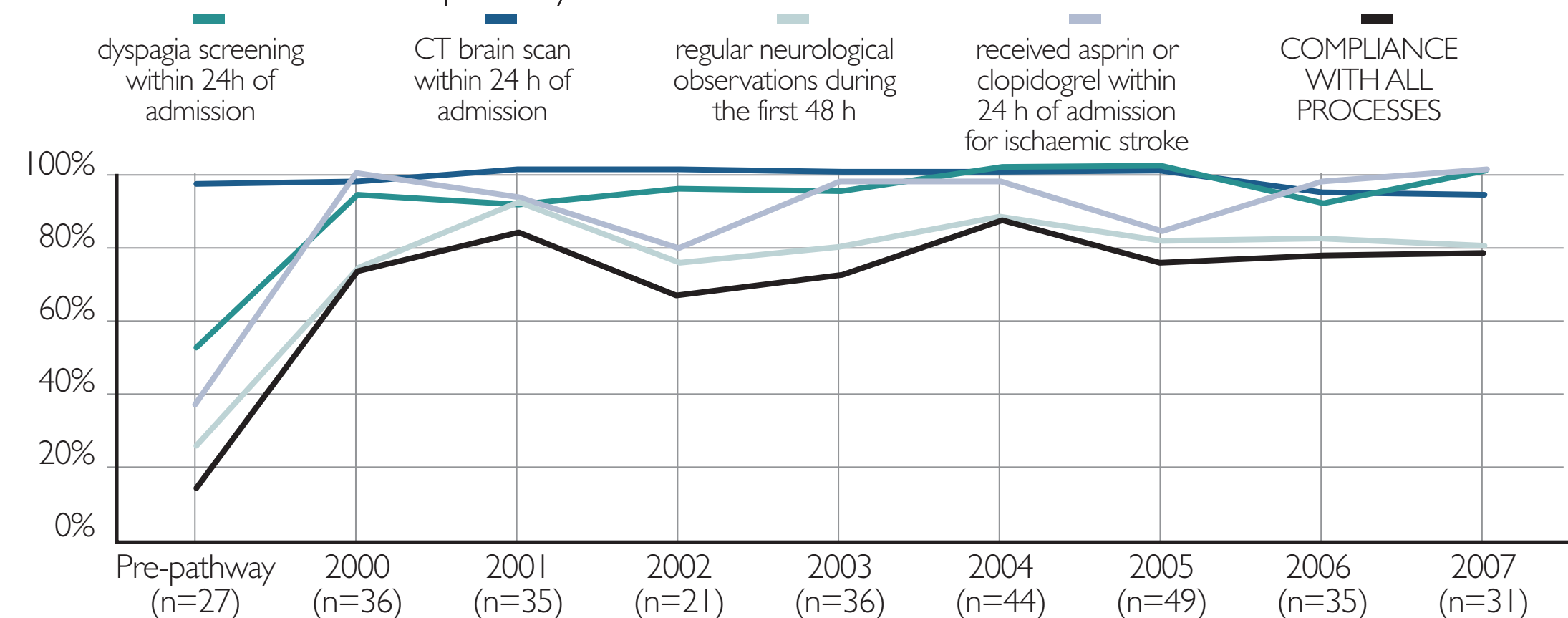
Clinical pathways incorporating checklists and reminders are an effective method of improving and sustaining the quality of patient care. The "all or none measurement" approach has provided added precision to the measurement of this improvement and identified where further improvements can be made.

## RESULTS

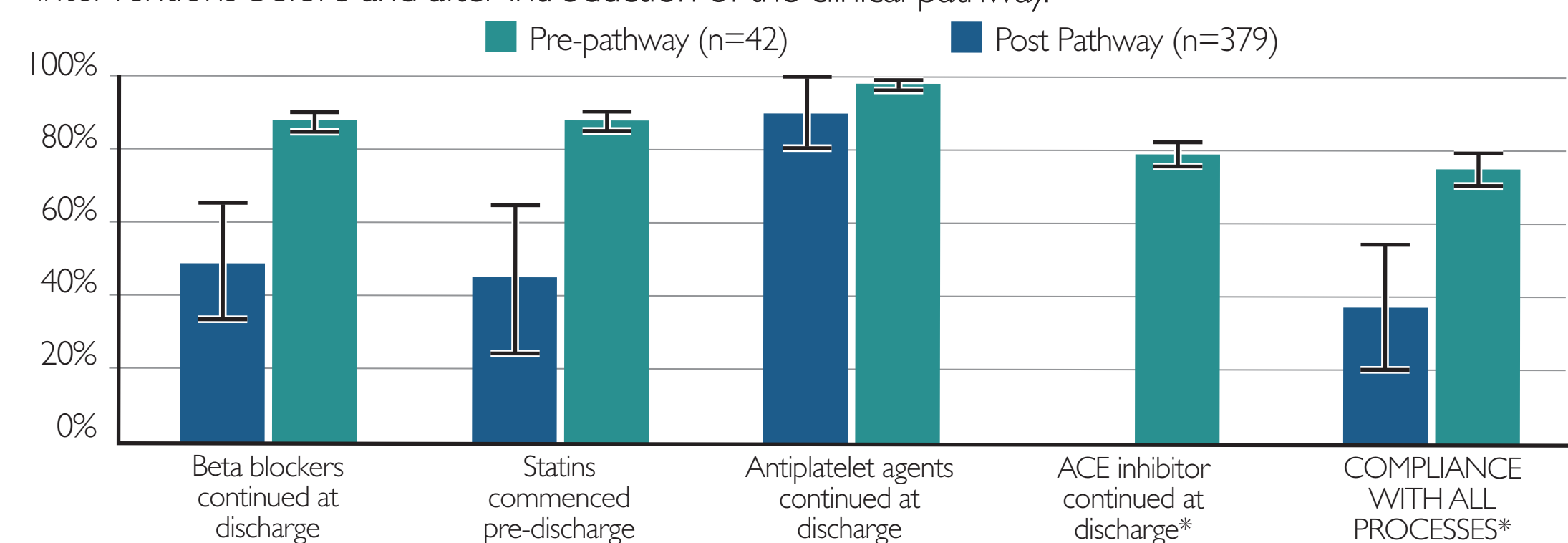
Proportion of patients with stroke who received key interventions before and after introduction of the clinical pathway.



Timeline of proportion of patients with stroke who received key interventions before and after introduction of the clinical pathway.

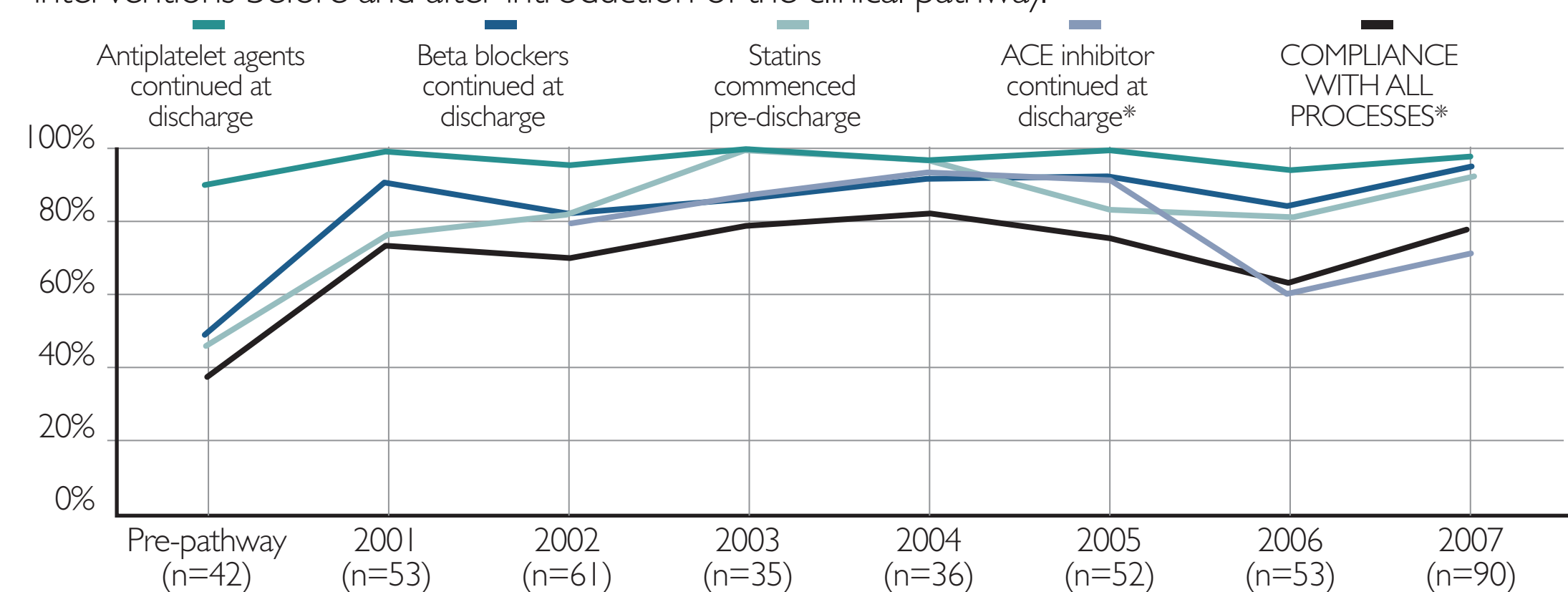


Proportion of patients with ST elevation acute myocardial infarction who received key interventions before and after introduction of the clinical pathway.



\*Measurement of ACE inhibitor data commenced in 2002 and therefore excluded from pre-2002 data

Timeline of proportion of patients with ST elevation acute myocardial infarction who received key interventions before and after introduction of the clinical pathway.



\*Measurement of ACE inhibitor data commenced in 2002 and therefore excluded from pre-2002 data

## REFERENCES

1. Nolan T, Berwick D. All-or-none measurement raises the bar on performance. JAMA, 2006; 295: 1168-1170.
2. Wolff AM, Taylor SA, McCabe JF. Using checklists and reminders in clinical pathways to improve hospital inpatient care. MJA 2004; 181: 428-431

