

Reducing Door to Balloon Times

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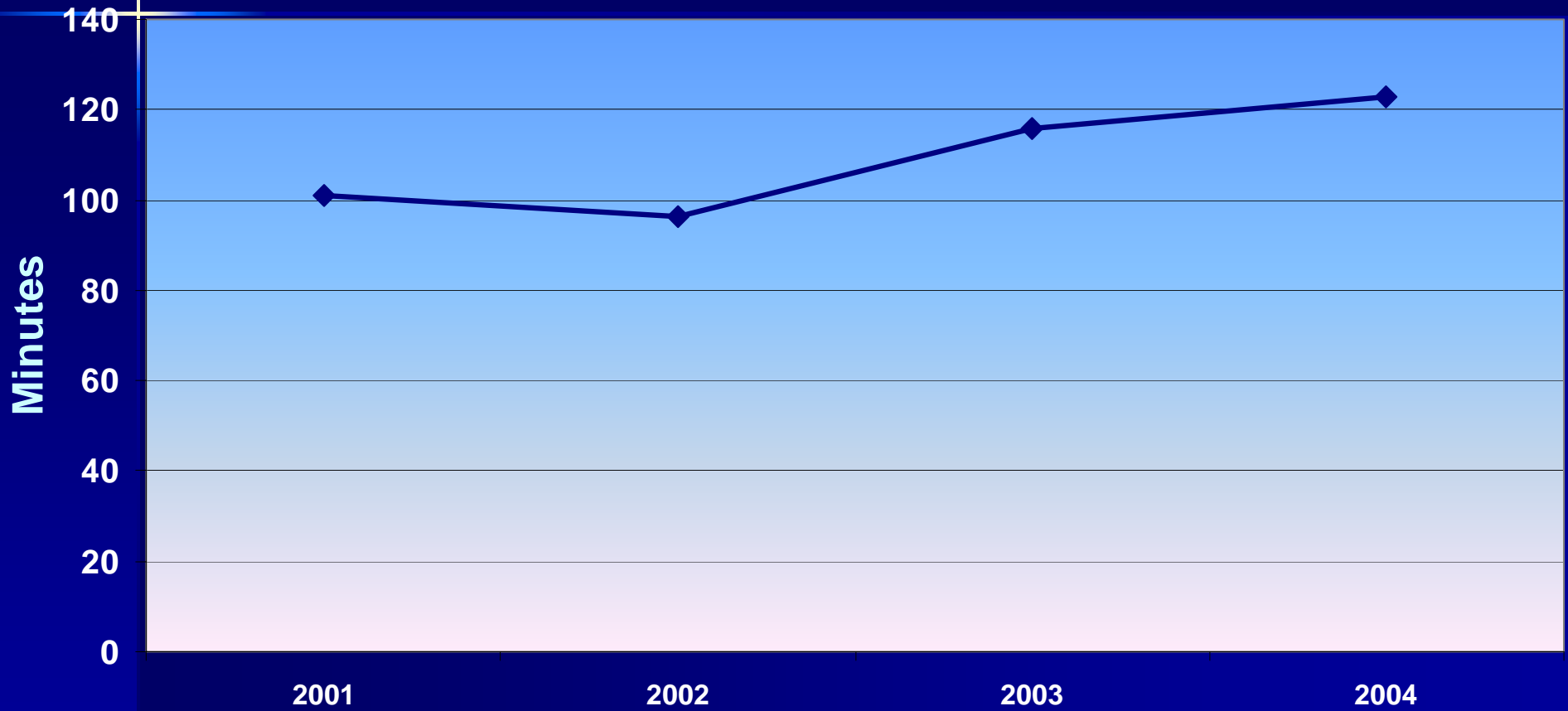
297 licensed beds

9 Cardiologists

The Beginning

Core Measures/CMS/JCAHO –
Publicly reported Data

Door-to-Balloon Time Median 2001 - 2004



This is a quality assurance document and is prepared pursuant to Harrison Medical Center's Quality Assurance Program and is in furtherance of Peer Review objectives. This document meets the definition of "QA record" and is confidential and protected. Disclosure protected by RCW 70.41.200; RCW 4.24.250 and RCW 42.17.310.

**We have a
problem!**

“Activate the Cath Lab”

July 2005

Interdisciplinary Group

- CMO
- Cardiologists
- ED Physicians
- Director Medical Imaging
- Director Emergency Department
- Cath Lab Supervisor
- Quality Improvement RN

What we agreed upon

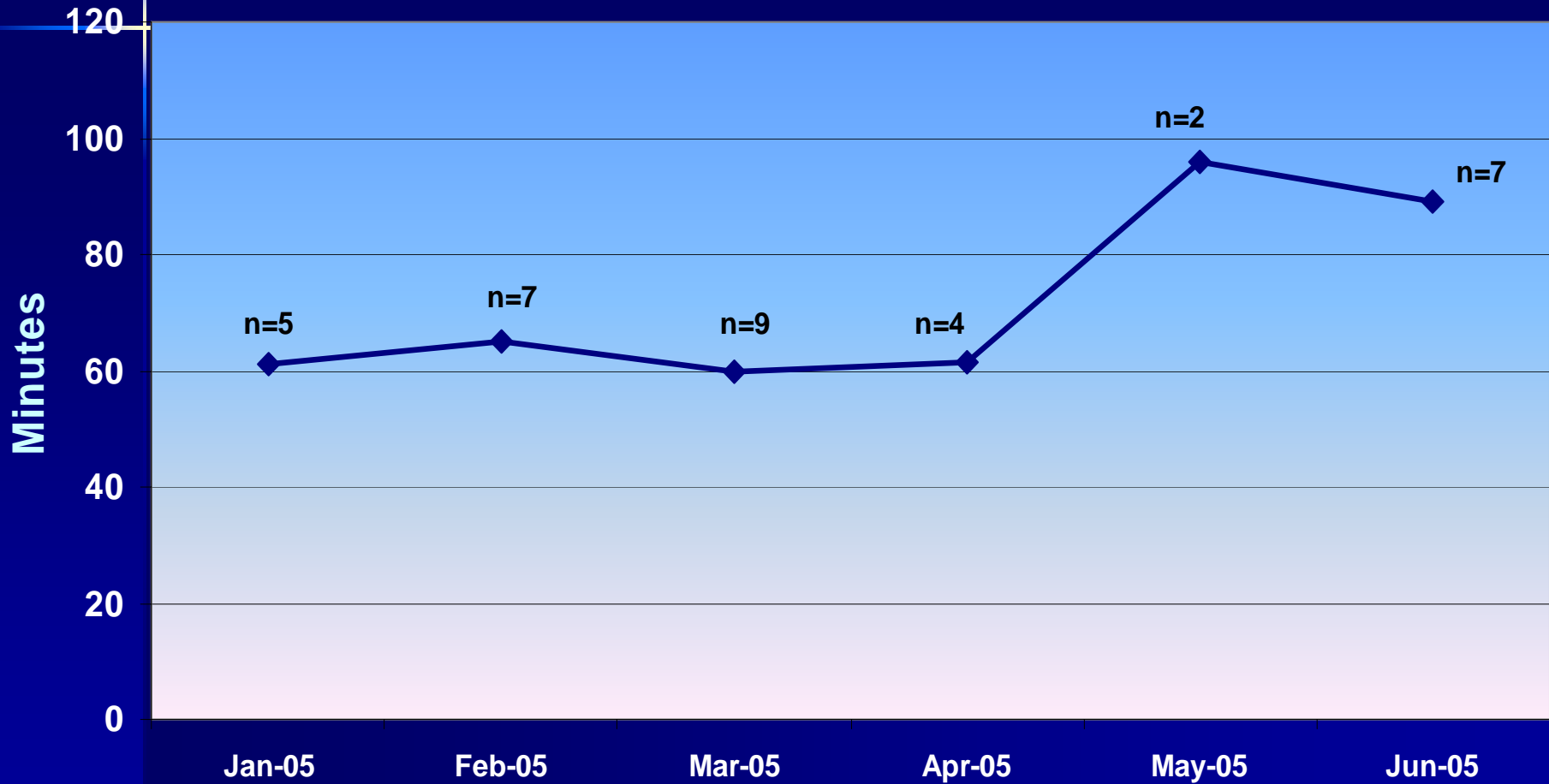
- PCI preferable to Lytics for STEMIs
- Door to Balloon time should be no more than 90 minutes

Retrospective Data Review

Previous 6 months

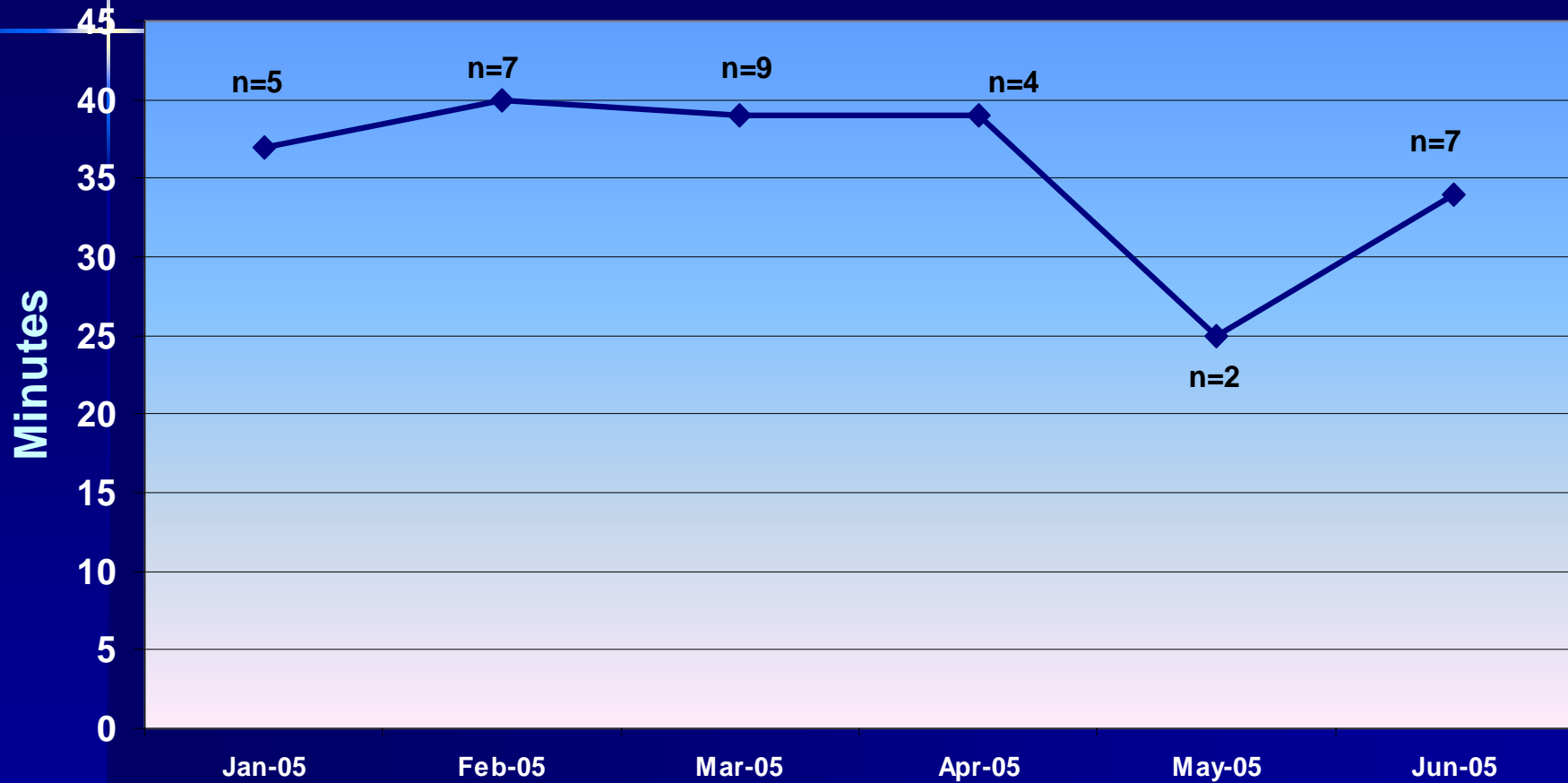
- ED Door to Cath Lab
- Cath Lab to Balloon Time
- ED Door to Balloon Time

Door-to-Cath Time Median January 2005 - June 2005



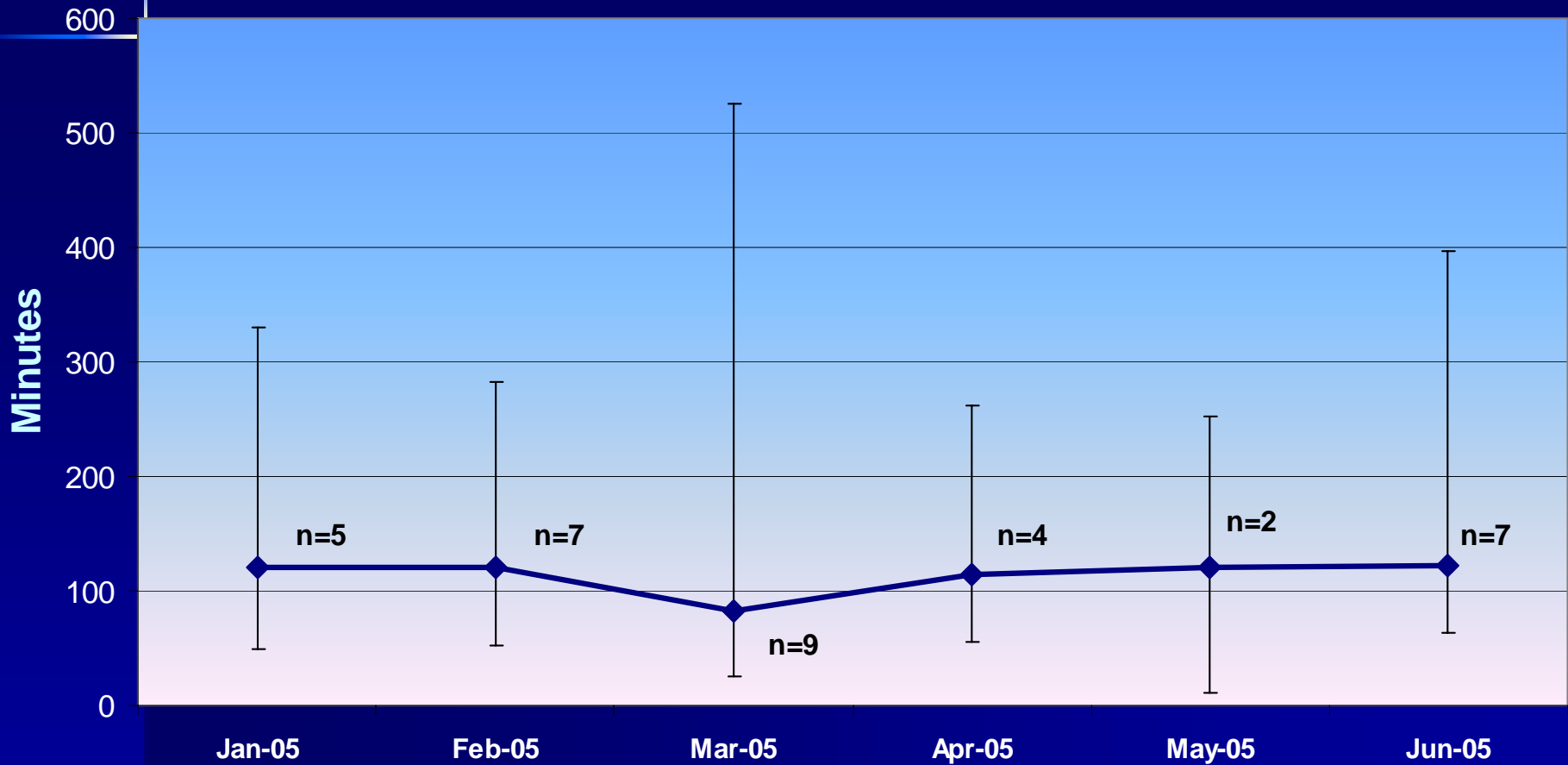
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Cath Lab to Balloon Time Median January 2005 - June 2005



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ED Door to Cath Lab Time Median January 2005 - June 2005



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Assessment

- Door to Balloon Times are too long
- Patient spending too much time in ED
- No clear clinical protocol for STEMI
- No process for evaluating care of patient
- No established system of communicating results

Barriers

■ Physicians

- Prompt recognition of STEMI
- Too many options for ED Physicians
- Cardiologists only activated cath lab after examining patient
- Problems with paging Cardiologists

■ Nurses

- No sense of urgency
- Delays in performing EKG
- Paperwork

What we decided

Reduce the time patient spends in ED by identifying:

- What is the minimum needed to be done in ED?
- Who can activate the cath lab?

Critical ED Interventions

- Undress patient
- ID Band
- ASA
- Nitro/Pain Meds
- I Stat Creatinine
- Beta-Blockers if time allows
(may be administered in cath lab)

Cath Lab Activation

- ED Physicians may activate cath lab
 - ED EKG
 - Medic EKG
- New system for paging Cardiologists
 - “Hot List” of pager/alternative numbers
 - Persistence is key

Performance Monitoring

- Continue monitoring time intervals retrospectively
- Report data quarterly at Cardiology Service Line Meetings

Task Force

- Composition:
 - ED Director
 - Medical Imaging Director
 - Cath Lab Supervisor
 - Quality Improvement RN
- Purpose
 - To create a “pit stop” approach for moving patient efficiently through ED to Cath Lab

ED Monitoring

- Intervals
 - Placed in treatment area
 - Stat EKG
 - EKG reviewed by physician
 - Cath Lab Activated
 - Cath Team Arrives
 - Patient transported to Cath Lab
- Time standards set

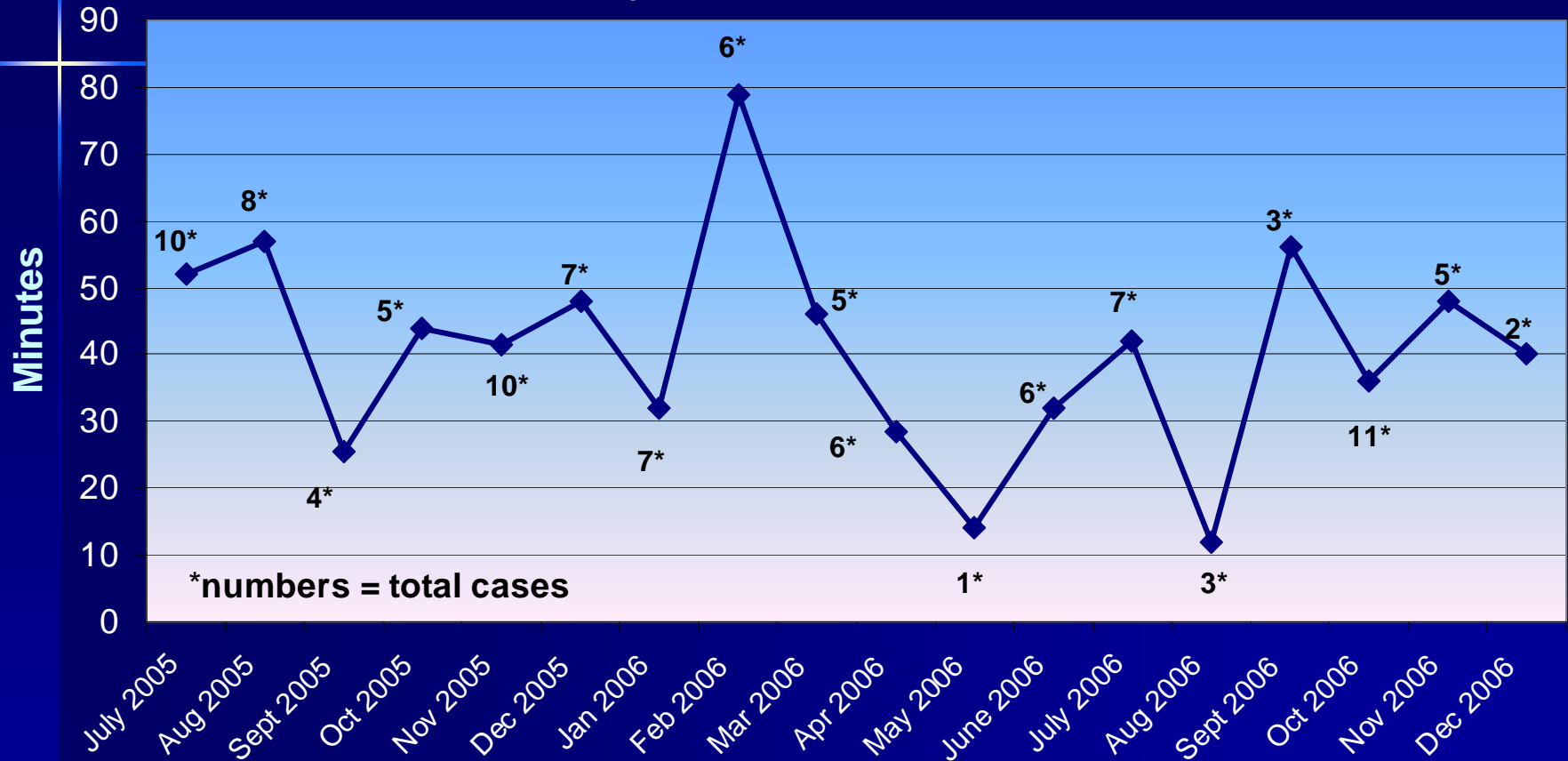
Case Review

All STEMI cases with Door to Balloon times greater than 90 minutes will be reviewed at Cath Conference.

Preferably ED physician/Medical Director and Cardiologist to be present

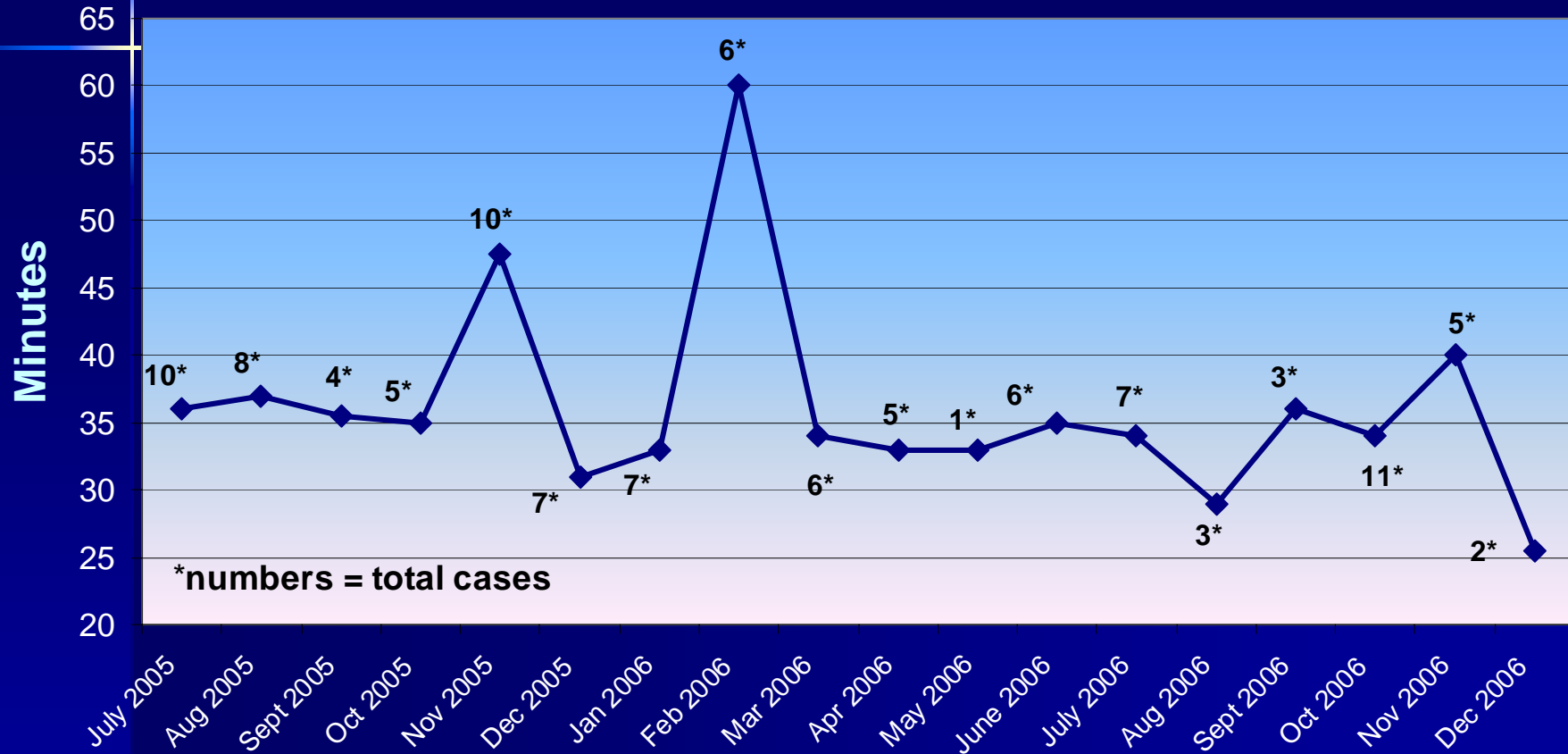
Purpose is to identify what events caused delays – Educational not punitive

Door to Cath Lab Time Median July 2005 - December 2006



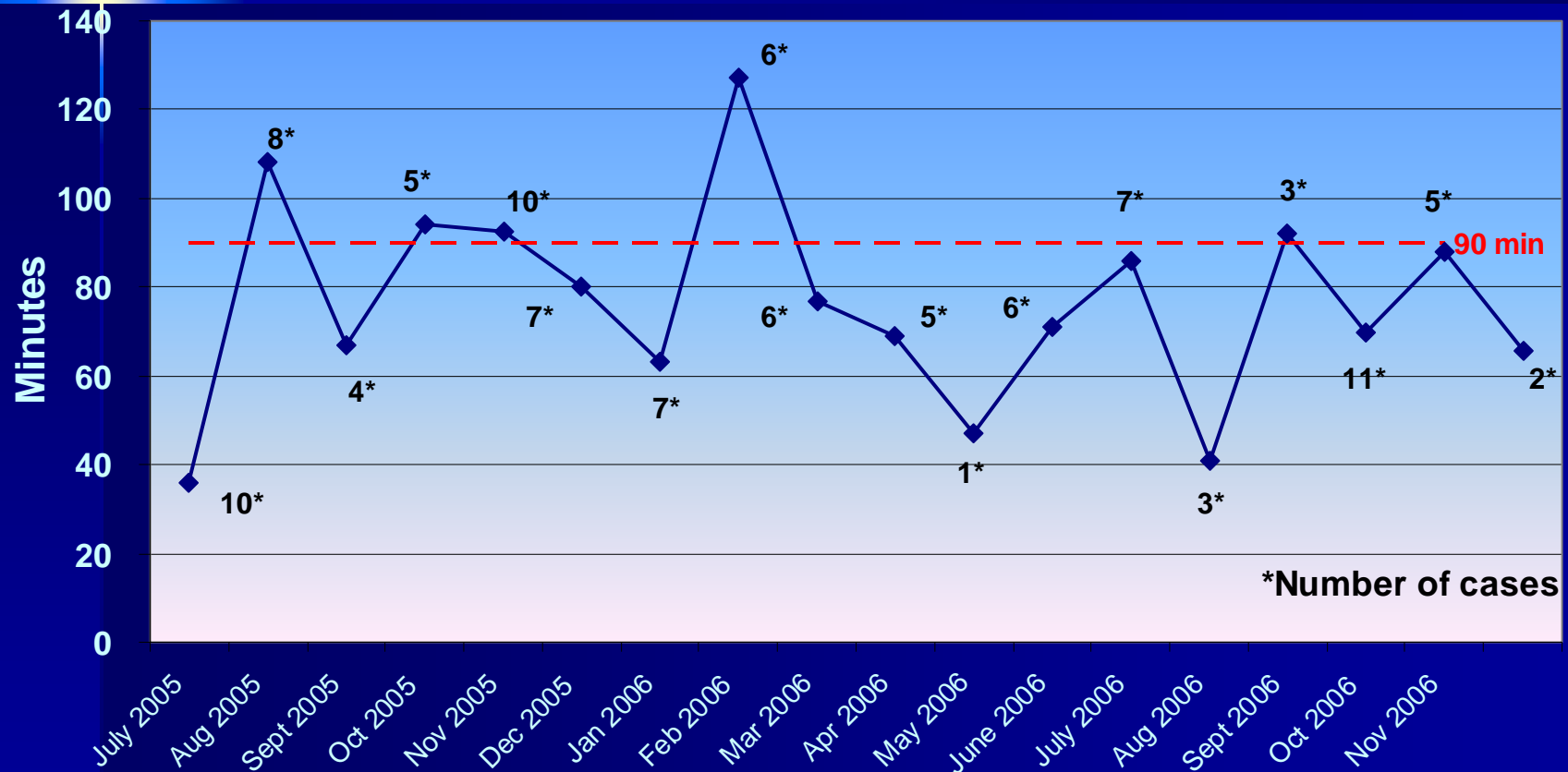
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Cath Lab to Balloon Time Median July 2005 - December 2006



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Door-to-Balloon Time Median July 2005 - December 2006



*Number of cases

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Interventions

- Issues regarding consents
- ED standard order sets
- “Pit Stop” approach – all tasks identified and assigned
- STEMI packets
- Stop Watch utilization
- Post PCI conference
- Single Call pager activation

Where are we now?

1st Quarter 2007 (n=18)

- ED to Cath Lab

Median = 34.5 (Range 10-73)

- Cath Lab to Balloon Time

Median = 30.5 (Range 18-49)

- Door to Balloon

Median = 63 (Range 36-119)

What Is Next

D2B Alliance

Goal: 75% of all STEMI's admitted through the ED have door to balloon times of ≤ 90 minutes

Our Mission

We make a positive difference in
people's lives through exceptional
medical care