

Improving Quality of Care for Patients with Diabetes Mellitus

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Improving Quality of Care for Patients with Diabetes Mellitus

- Aim statement and team
- Graphical presentation of the process
- Baseline data
- Leverage Point and Change Concept
- Implementation
- Results: SPC charts
- Future plans

Aim Statement

To increase the proportion of diabetic patients with yearly cholesterol testing from 77% to 85% in internal medicine outpatient clinic over two months

Austin Diagnostic Clinic



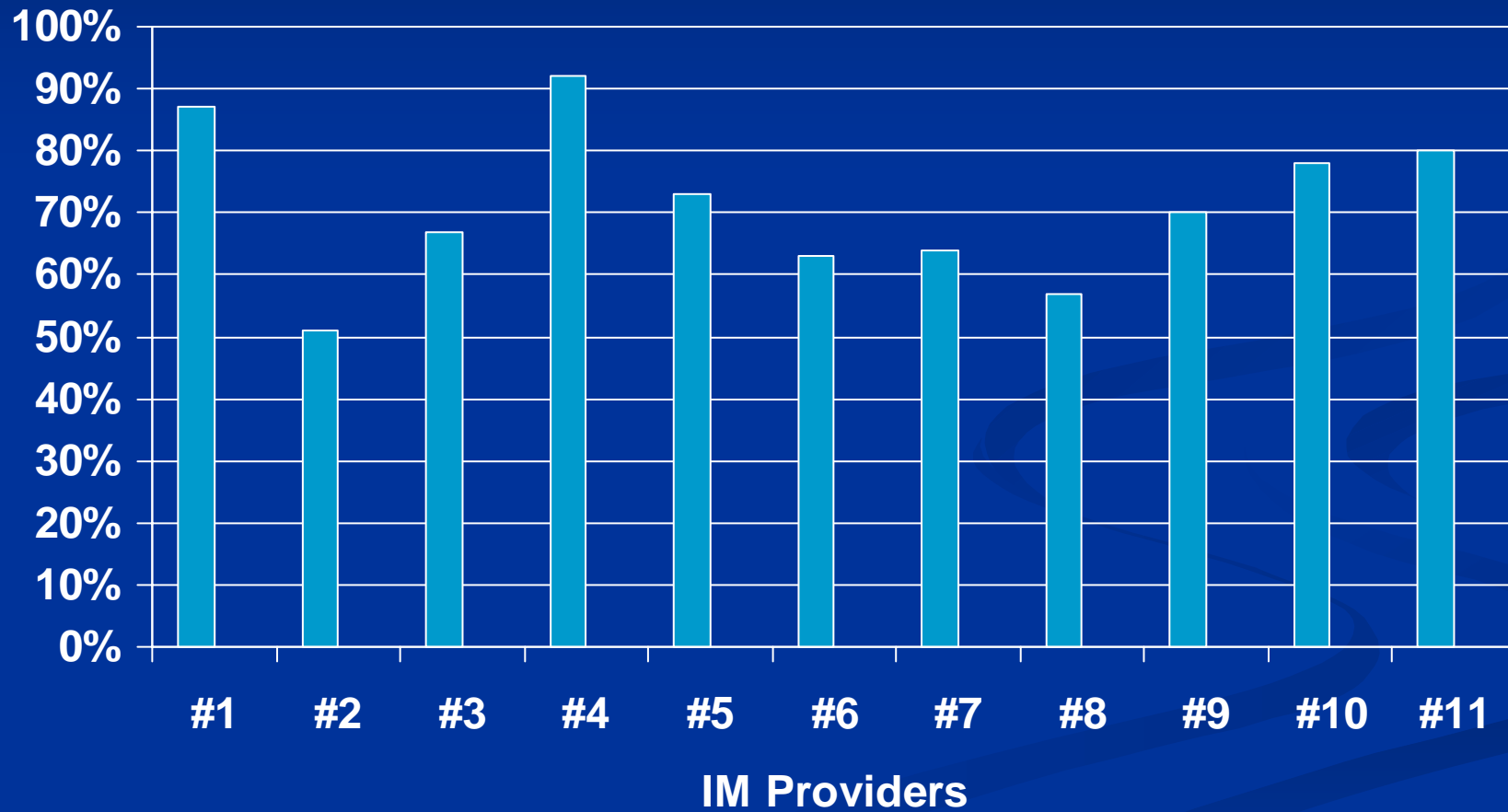


Significance of the Problem

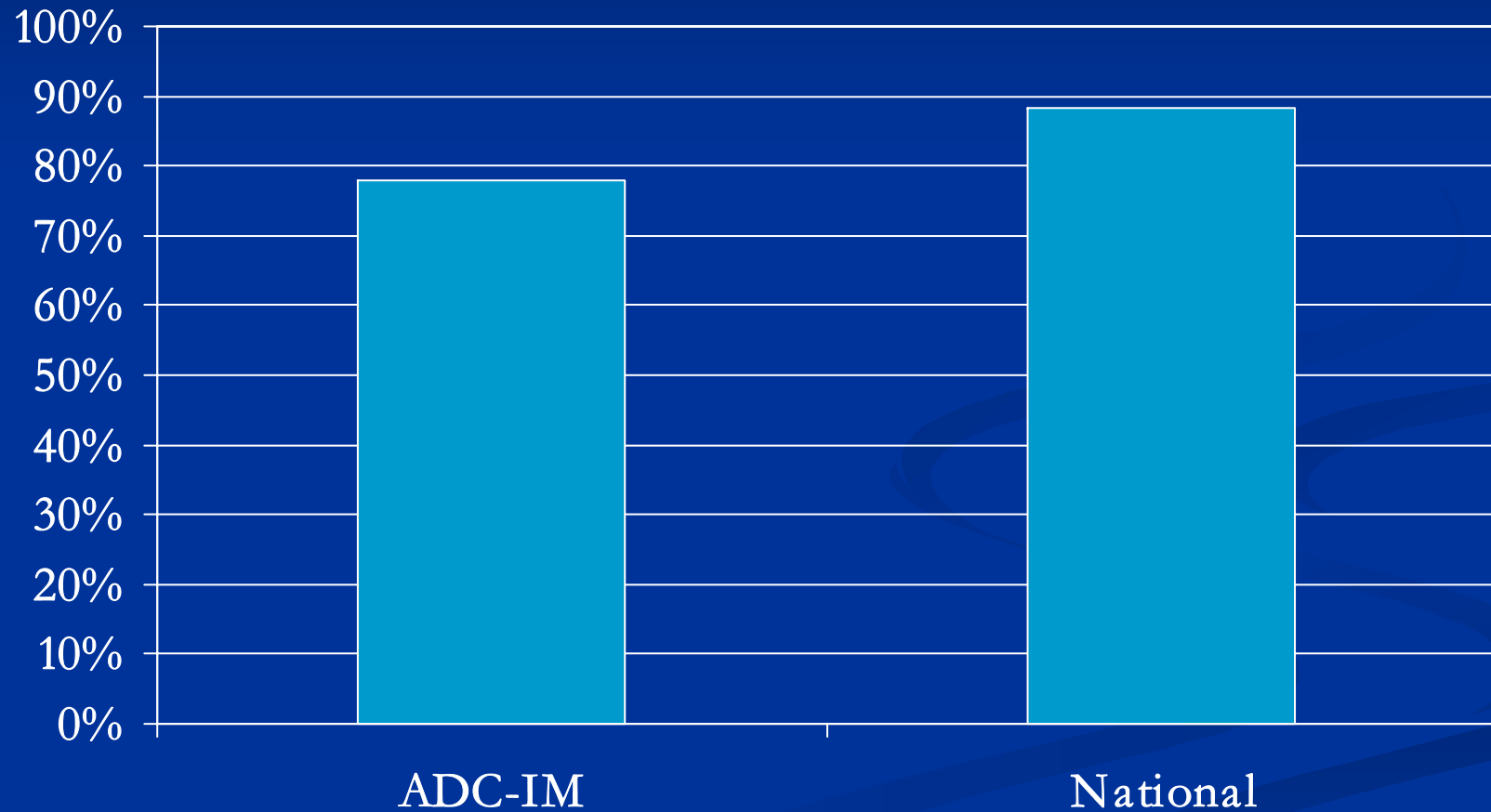
- Why is this project important?
 - Sixth leading cause of death by disease
 - Prevalence: 18% patients age >60 yr
- What impact will it have?
 - Saving lives & complications
- Why are we choosing this project?
 - Variation in cholesterol testing
 - We are below the national average

Cholesterol Testing

Variation within Internal Medicine



Cholesterol Testing National Average



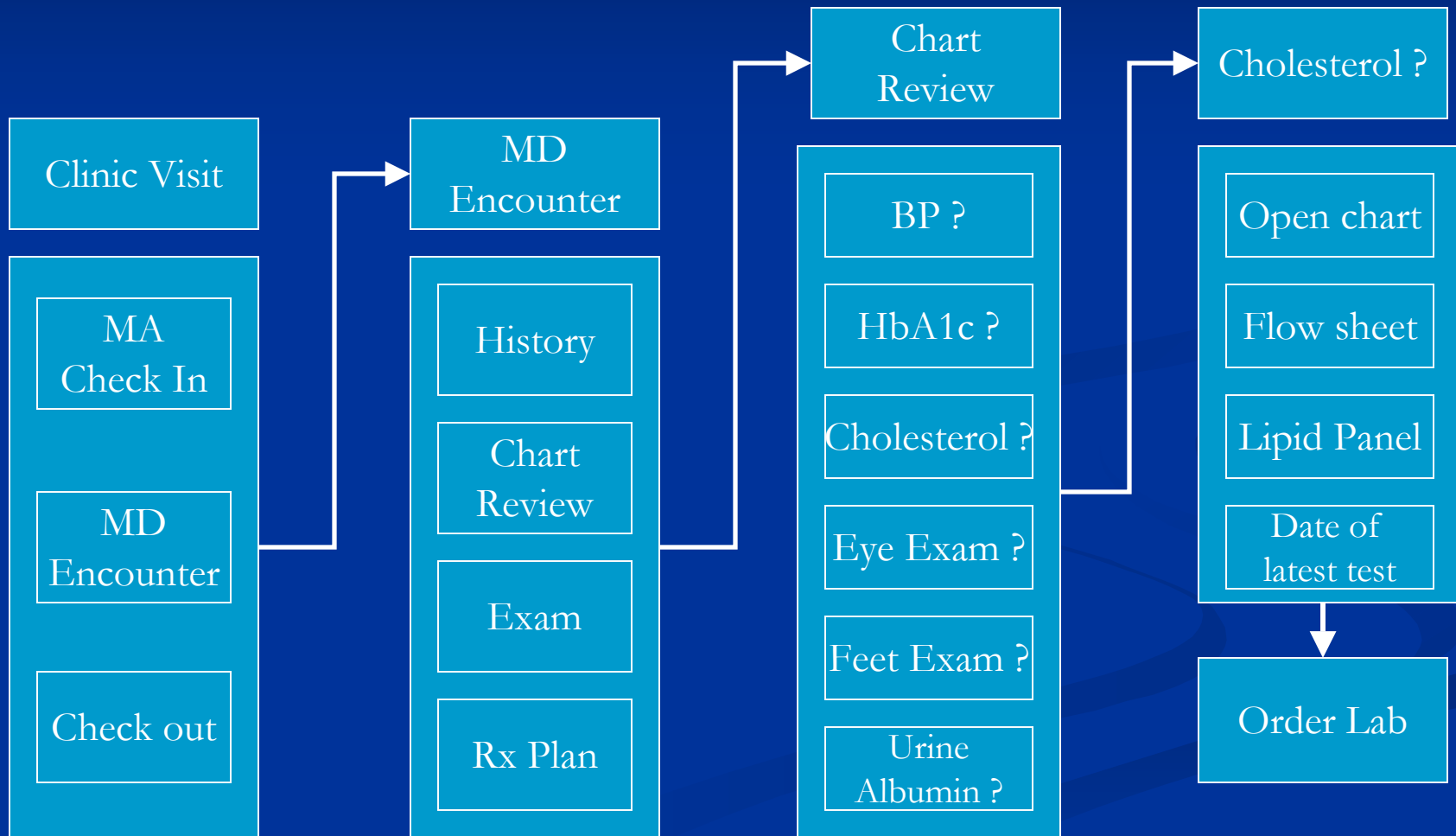
Meeting with IM Providers

Brainstorming

- Six out of eleven IM providers
- Emphasize patient focus
- Improve quality of care for DM
- Present data (Variation, IM Vs. National)
- Consensus: Yearly cholesterol testing
- Process of care and Cause-Effect Analysis

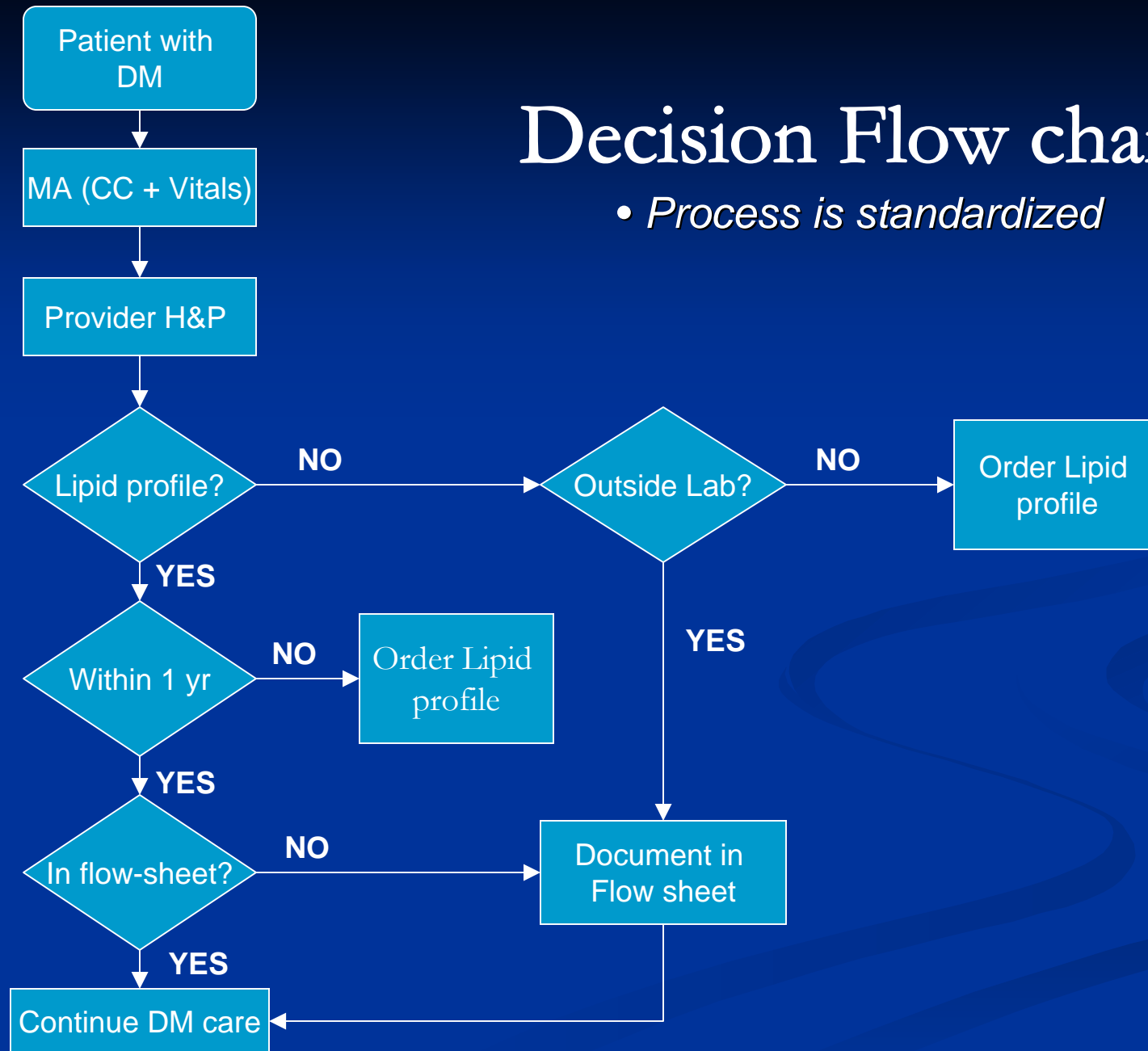
Process of Care

Conceptual Flow Diagram

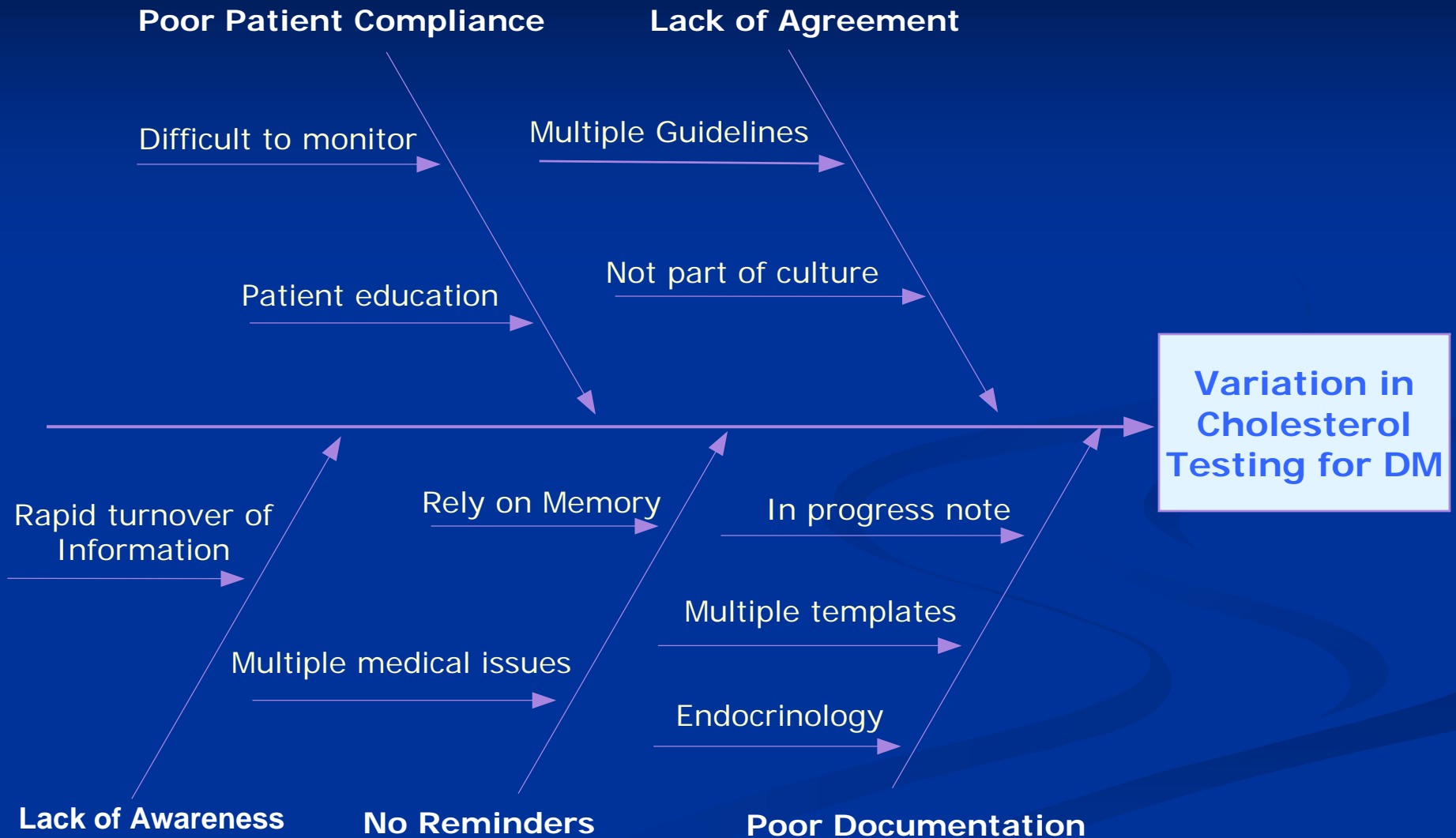


Decision Flow chart

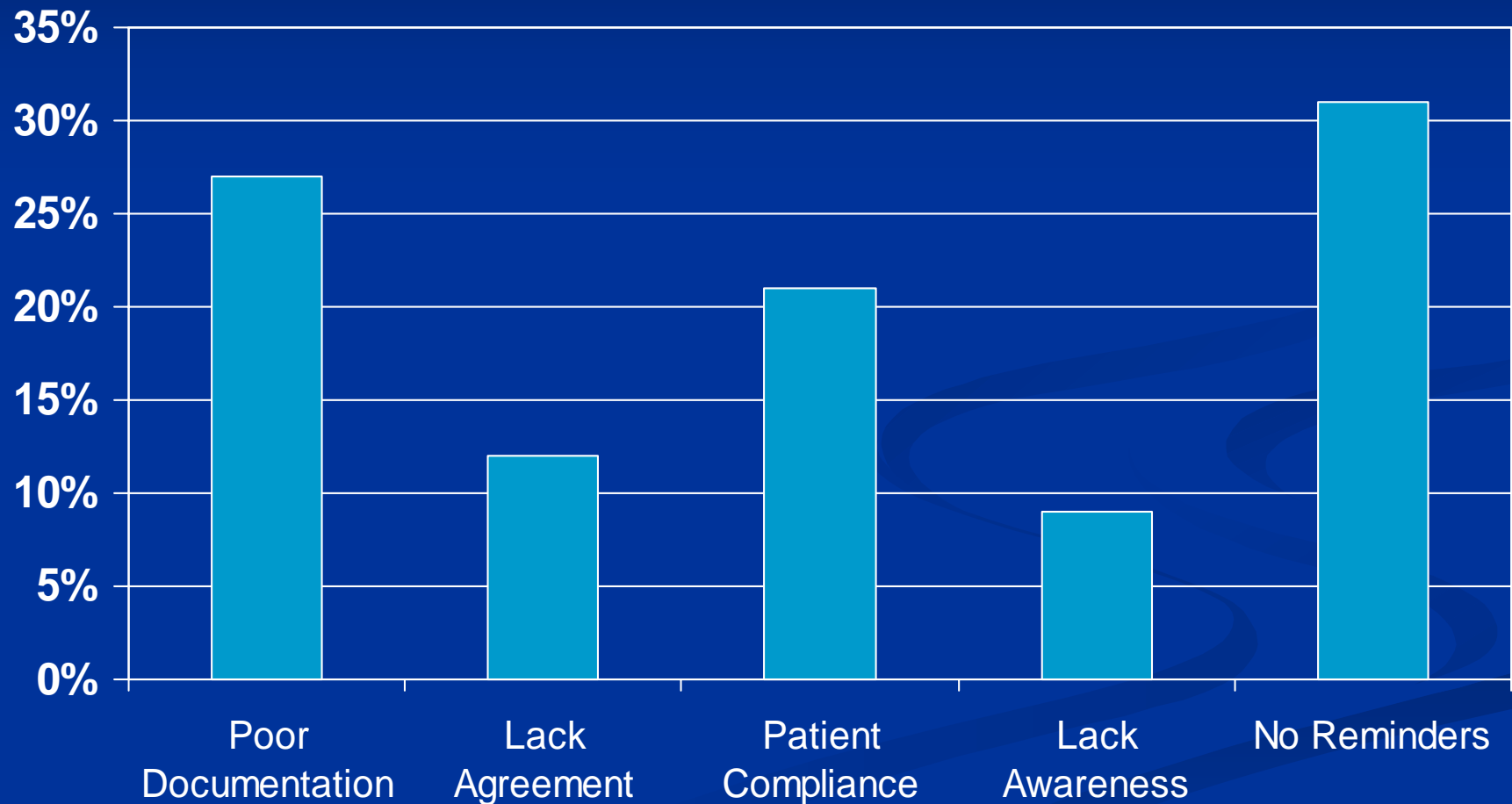
- *Process is standardized*



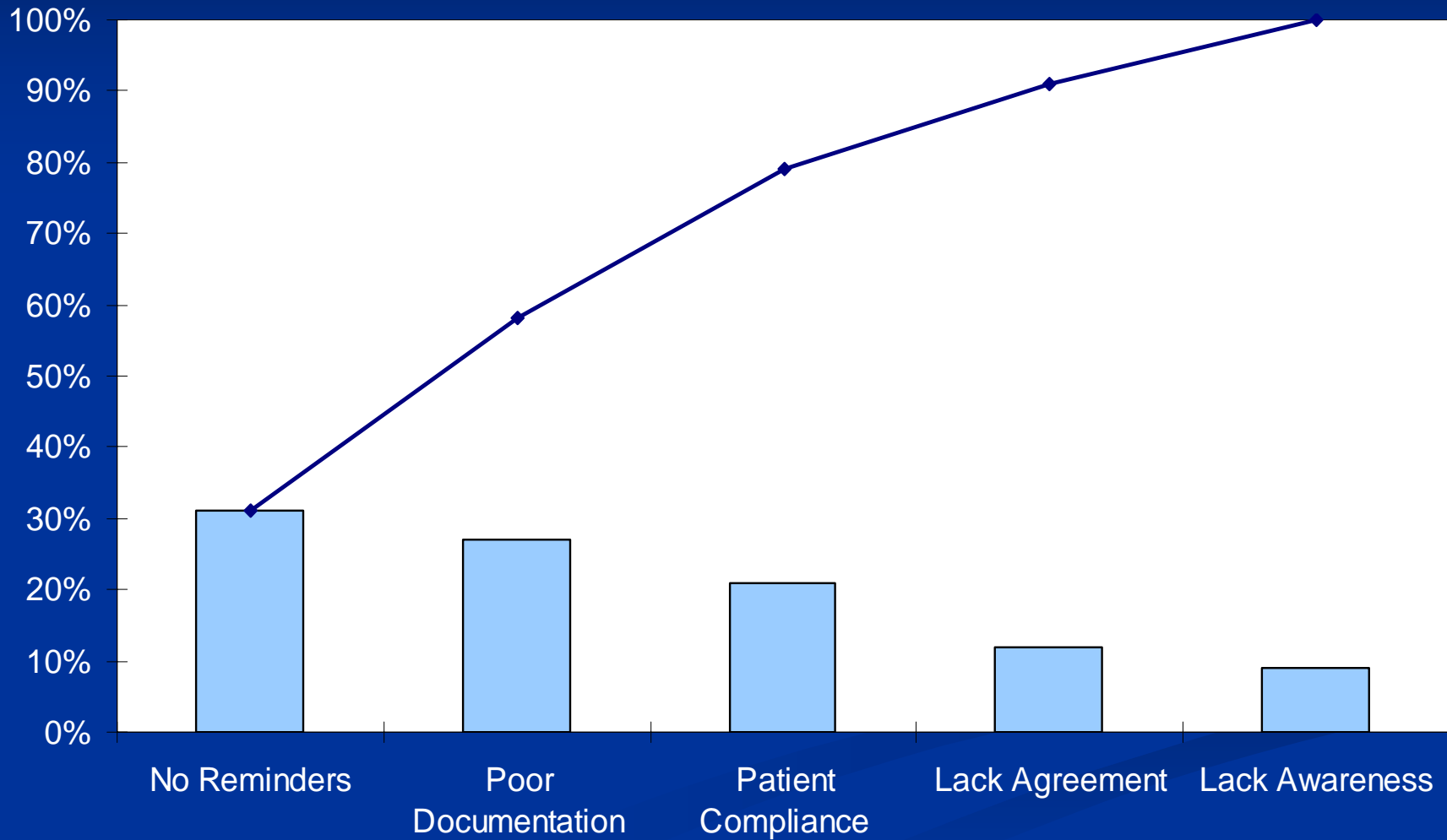
Causes of Variation



Frequency of Causes of Variation Providers' Survey



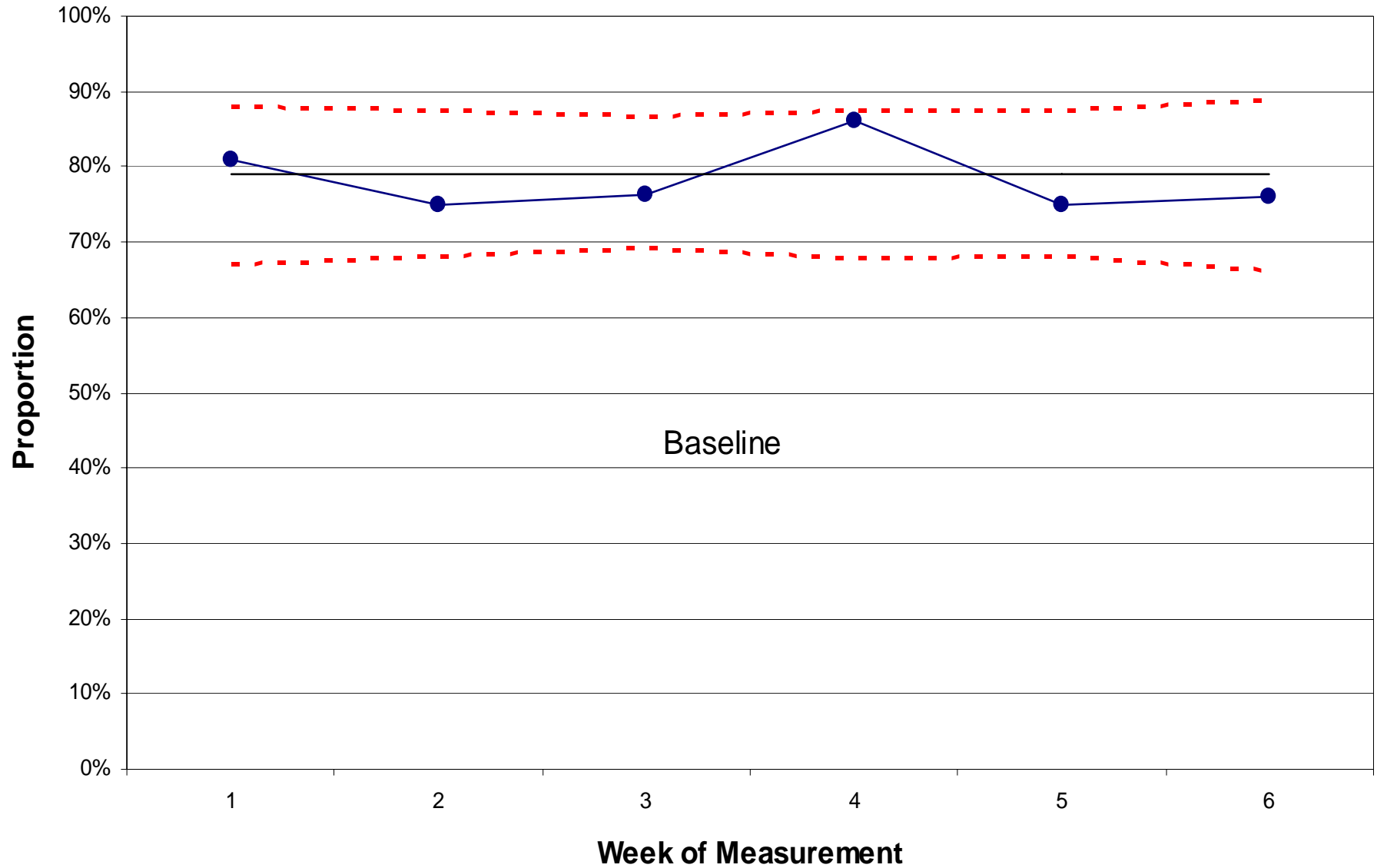
Cumulative Frequency Pareto Chart



Data Collection

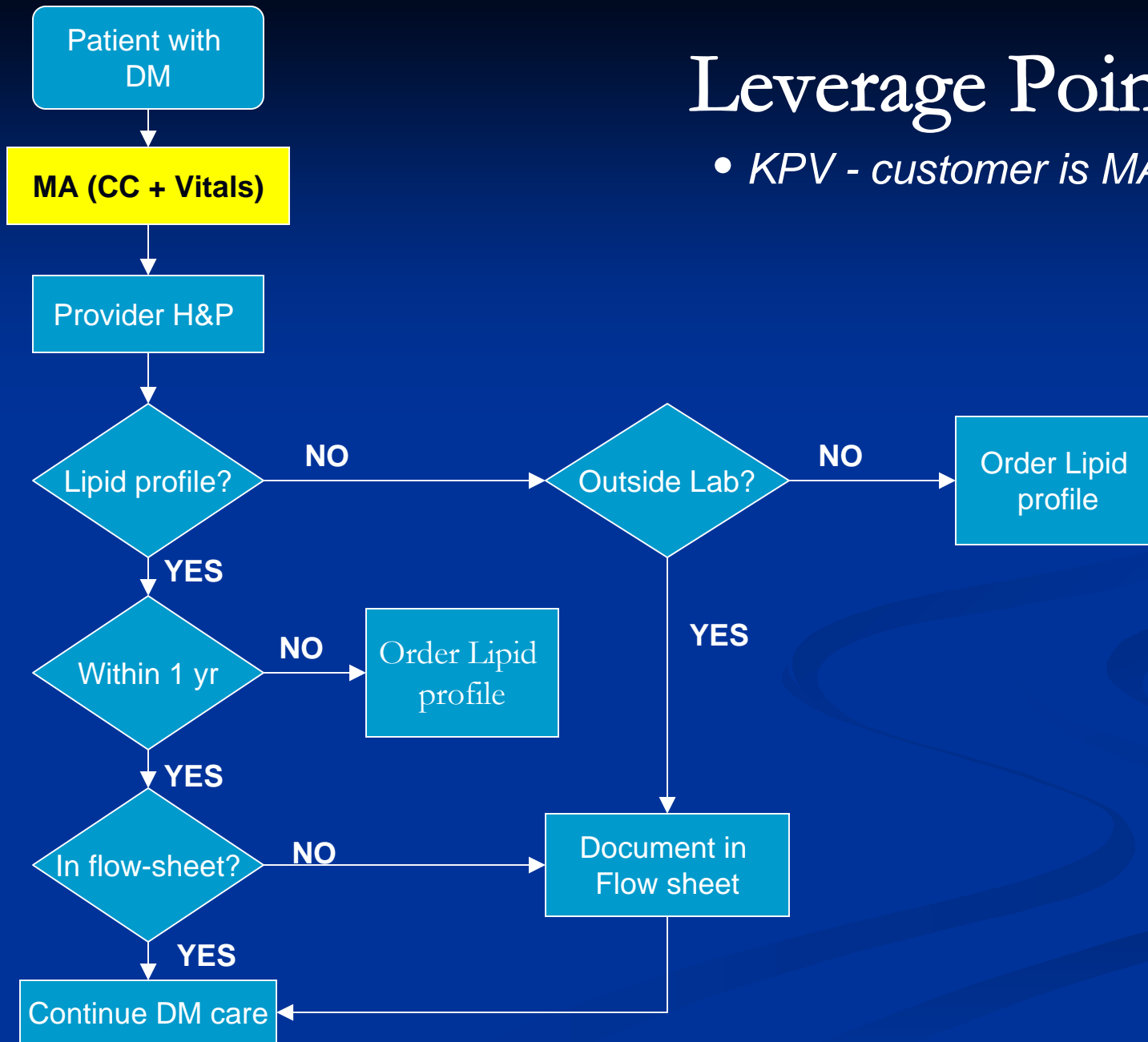
- Key Quality Characteristics (KQC)
 - Proportion of DM patients with yearly cholesterol testing
- Query of data collection
 - Providers = internal medicine
 - Patients = DM patients seen per week (IDX)
 - Clinical data = cholesterol testing (EMR)
 - Time range for cholesterol testing = 1 year

Proportions of Patients with Yearly Cholesterol Testing



Leverage Point

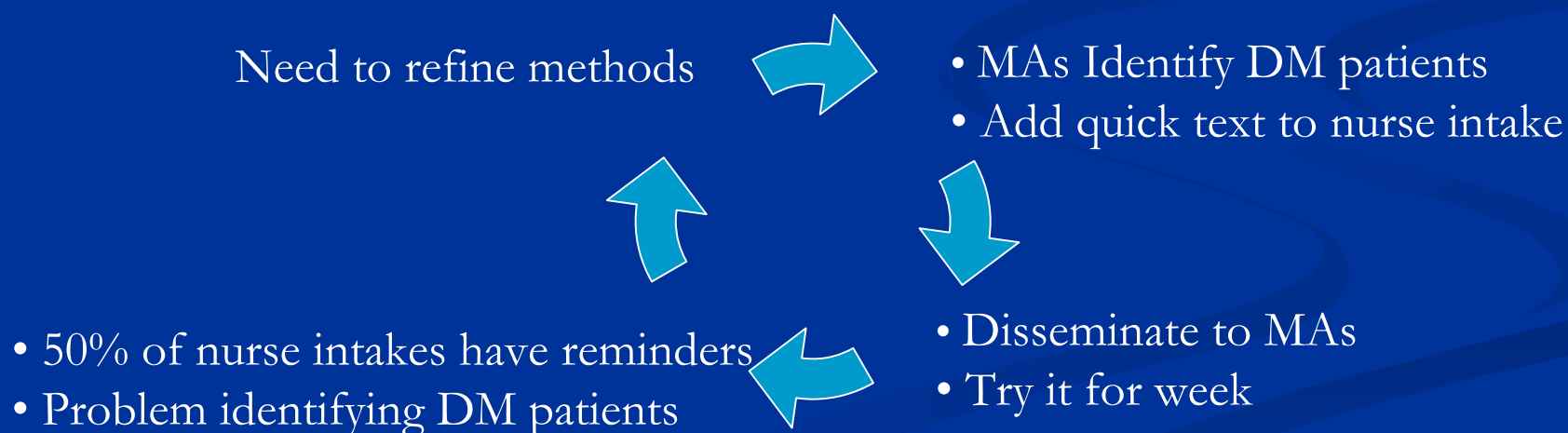
- *KPV - customer is MA*



Implementation (PDSA-01)

Testing Change Concept

- **Aim:** Medical assistant to remind providers of cholesterol testing
- **Measure:** # nurse intake with reminder / total nurse intake (wk)
- **Change:** Add quick text “.dm” to nurse intake



Implementation (PDSA-02)

Testing Change Concept

- **Aim:** Medical assistant to remind providers of cholesterol testing
- **Measure:** # nurse intake with reminder/ total nurse intake (wk)
- **What:** Modify nurse intake: Pop-up button for DM

Need to update Problem List

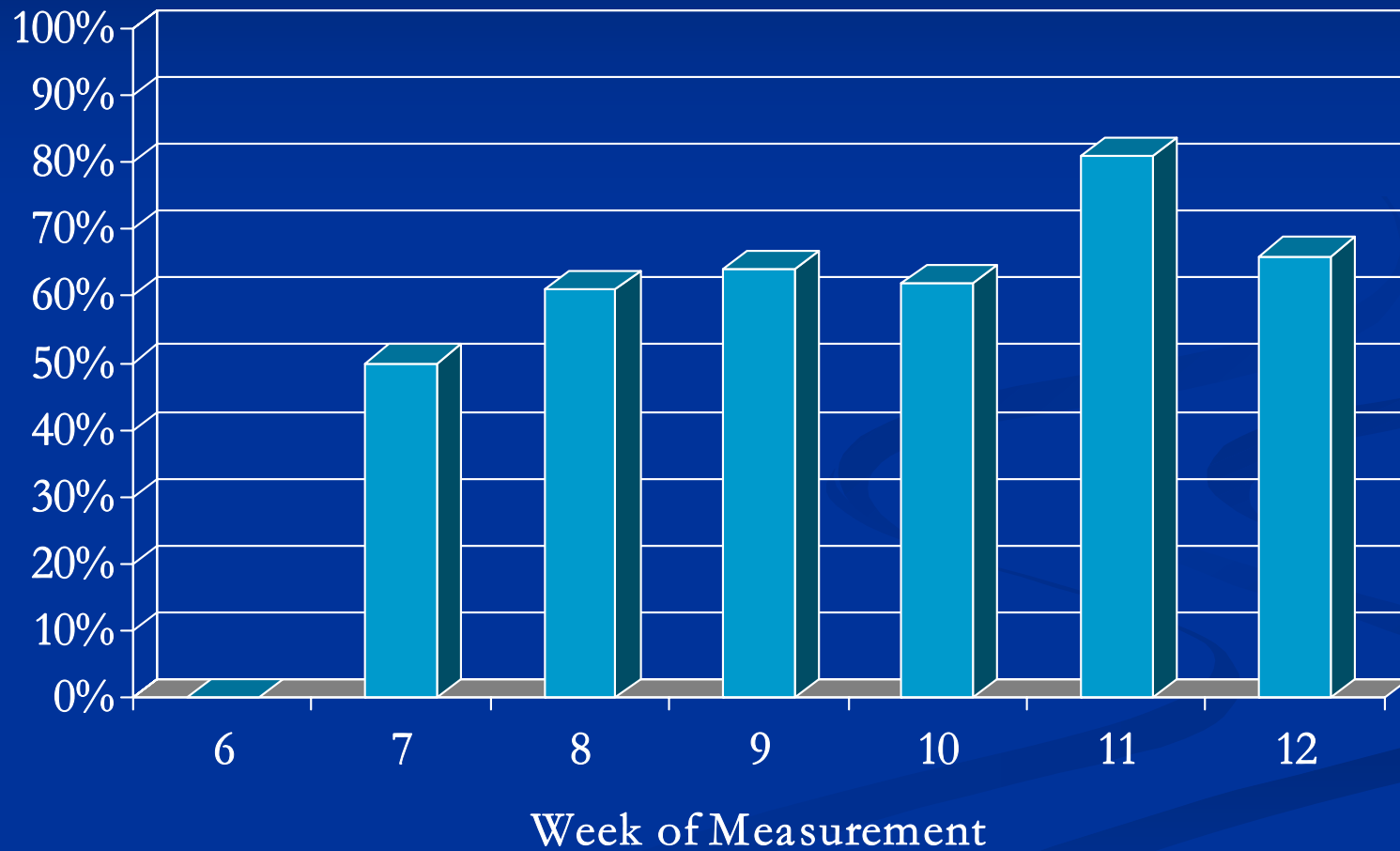
- 60% nurse intakes have reminders
- Still not capturing all patients

MA press button on nurse intake
(reminder for the reminder)

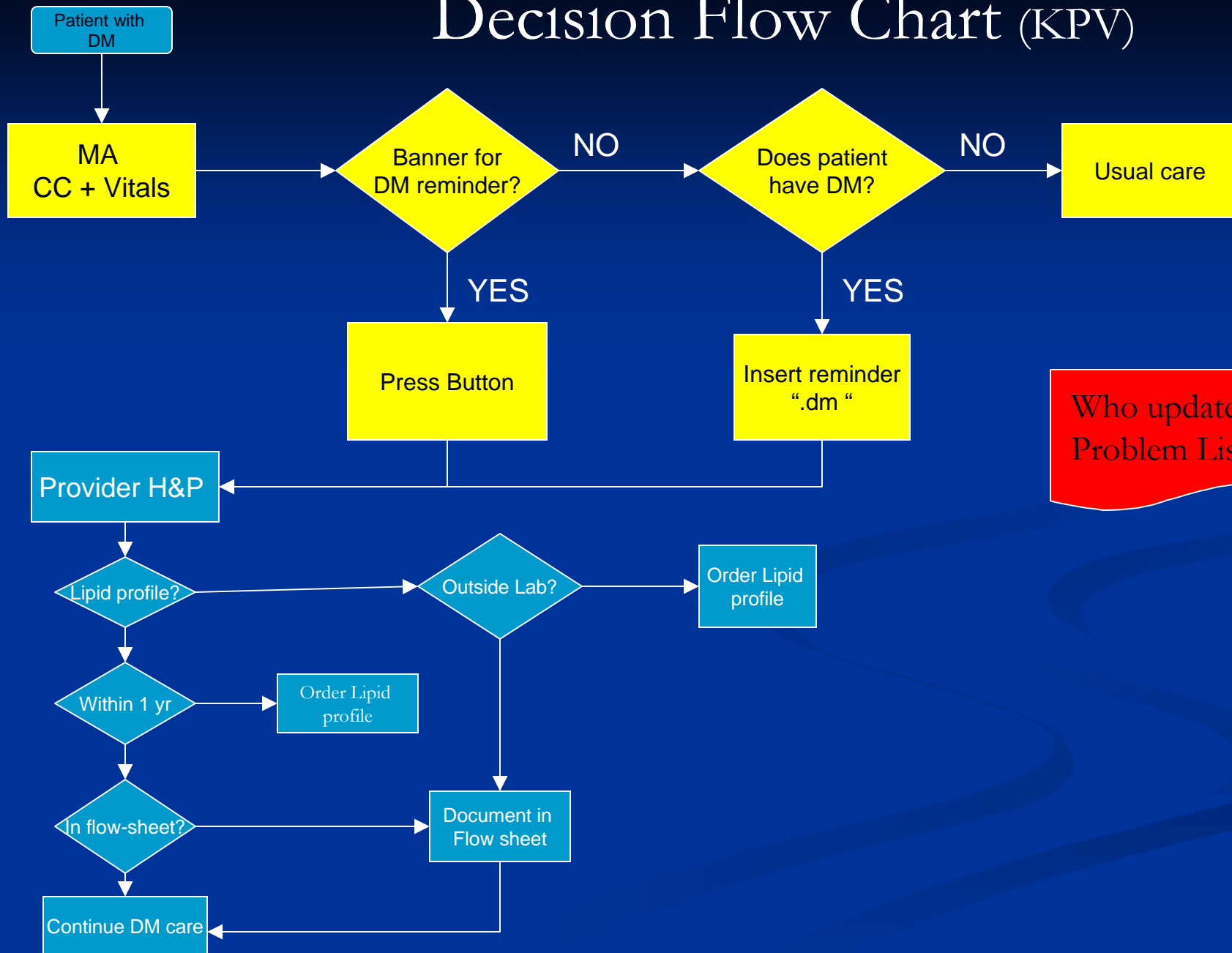
All MAs try it for a week



Proportion of Nurse Intakes with Reminders



Decision Flow Chart (KPV)



Who updates Problem List?

Implementation (PDSA) Internal Medicine Providers

PLAN

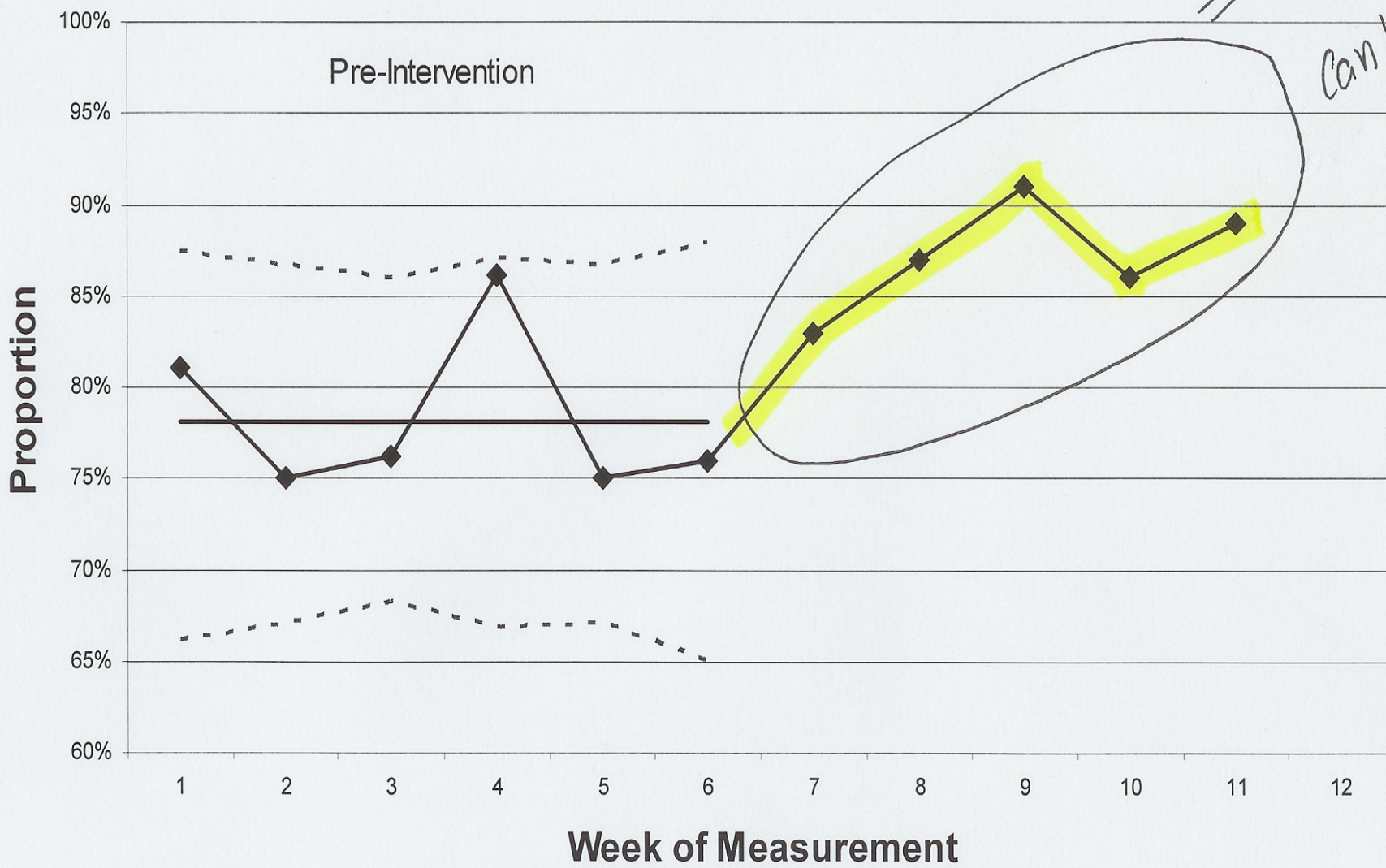
- Tangible aspect of implementation
 - Make it easy to do the right thing
- Changing physicians' behavior (Buy In)
 - Increase awareness of the problem
 - Motivate them
 - Link quality to productivity

Implementation (PDSA) Internal Medicine Providers

DO

- Put reminders on nurse intake
- Add quick text that automatically pulls all necessary information
- Show providers variations of care
- Compare performance (within IM & national average)
- Discuss pay for performance
- Use informal leader

Diabetes Mellitus-Cholesterol Screening



—◆— % LDL — Mean - - - LCL - - - UCL

Implementation (PD^SA)

Internal Medicine Providers

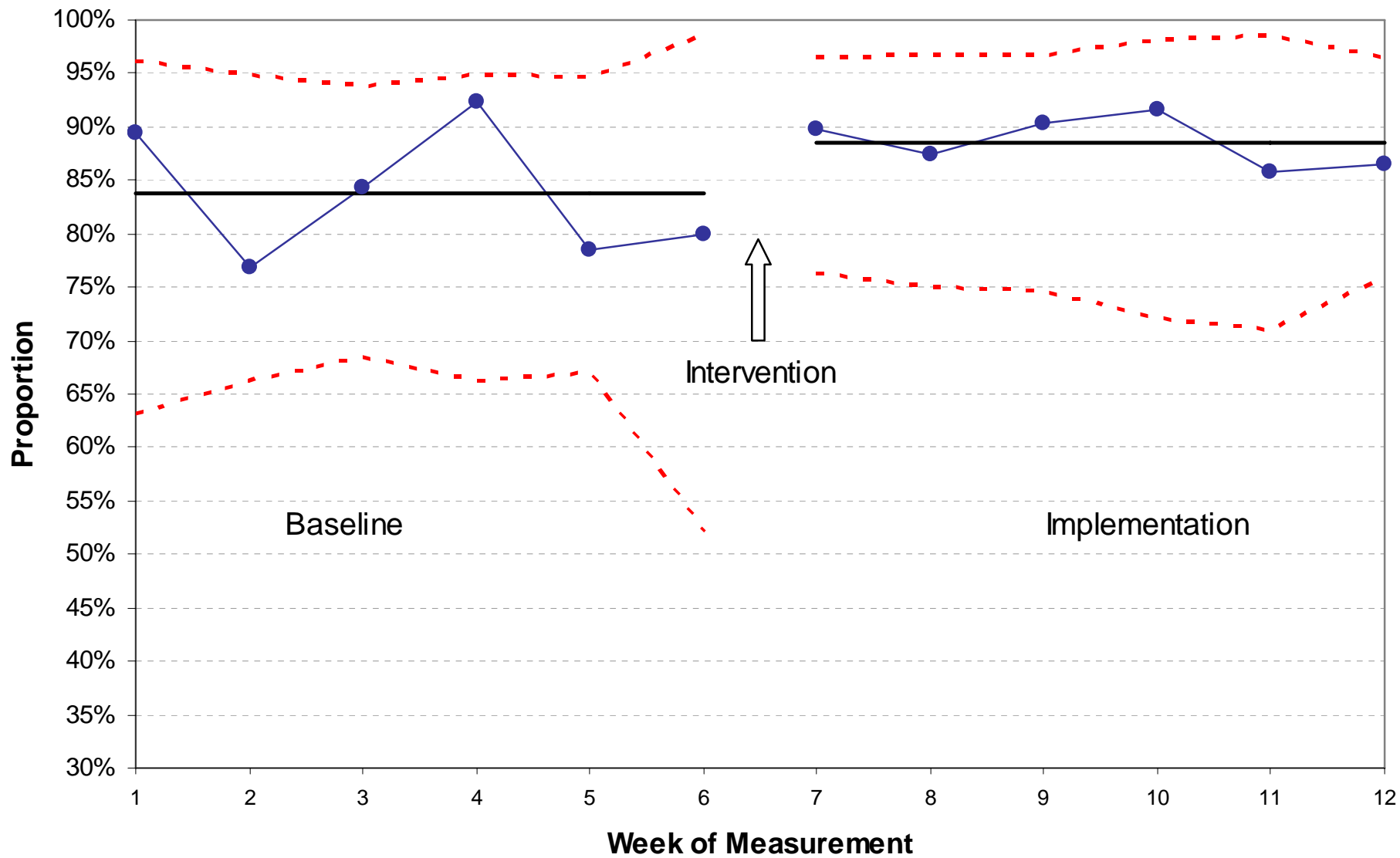
STUDY

- The quick text needs clarification
- Some providers did not give their feedback
- Some providers did not attend the meetings
- Reminders-Problem list
- Results in SPC charts

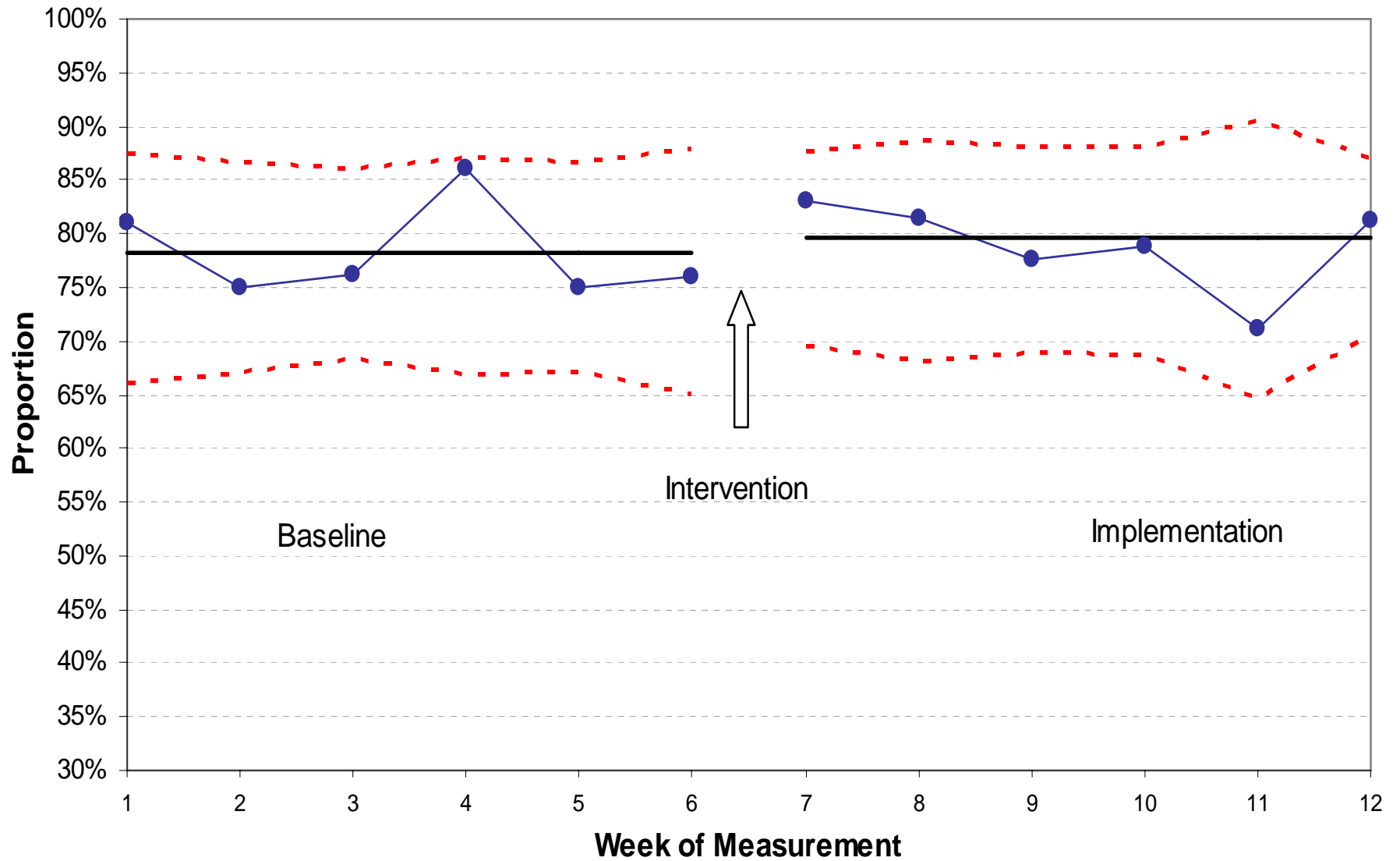
Results

- Part I: Users of electronic medical records
 - Participated in meetings
 - Gave their input
 - Reviewed the data
 - Whose problem lists are updated
- Part II: Total internal medicine providers

Proportions of Patients with Cholesterol Testing Part I - Users of EMR



Proportions of Patients with Cholesterol Testing Part II - Total Providers



Implementation (PDSA) Internal Medicine Providers

ACT

- Need to have a plan to involve providers who did not participate
- Need to implement a process to update “Problem List”

Future Plans

- Dealing with resistance/complacency
 - Build relationships (One on One)
 - Show them the results of this project
 - Show them their own data (quarterly results)
 - Give providers lists of patients that need testing
 - Surface, Honor, Explore, and Recheck resistance
- DM outcome measures
 - LDL control

Holding the Gains

- Quarterly feedback to providers
- Annual Quality Fair
- List of patients who need cholesterol testing
- Display results at work stations (Internal transparency)
- Continuous input from providers
- EMR-Problem list improvement project
- Rewards physicians and MA/RN!