

PROCESS RE-DESIGN TO IMPROVE HOSPITAL CARE

ATRIUM MEDICAL CENTRE HEERLEN, THE NETHERLANDS, IMPROVES THE ACCESS AND PROCESS TIMES OF ITS AMBULATORY AND INPATIENT SPECIALIZED CARE TO BE COMPETITIVE IN THE NEW DUTCH HEALTH CARE SYSTEM

ATRIUM MEDICAL CENTRE, HEERLEN, THE NETHERLANDS

Involved Senior Leaders / Advisors

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AIM

To decrease Access and Process Times by a Factor of four within a 2 year period in both Diagnostics and Intervention processes related to Arterial Flow Problems, Varices, Stroke, Total Knee Replacement, Total Hip Replacement, Colonoscopy, Colon Cancer Diagnostics & Intervention, and Cholecystectomy.

MEASURES

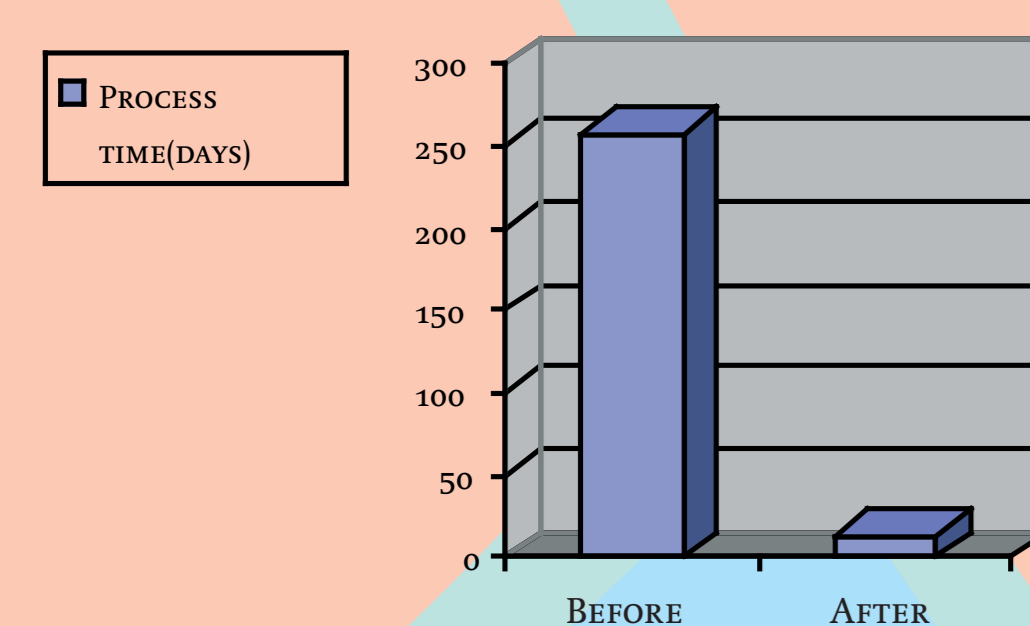
- Access Time (days)
- Process Time (days)

CHANGES

1. Communicated publicly symptoms indicating the (acute) need for professional help
2. Facilitated GP's diagnostics by Test-Charts (Stroke), Access to Hospital based Diagnostic Facilities (Colonoscopy) and Lab Services
3. Started Assessment and Report-back Service on Diagnostics Use and Referral by GP
4. Realized Process Scheduling instead of Step-by-Step Appointments
5. Created Process oriented electronic Records
6. Arranged new Team Mix
7. Added new Technology
8. Realized Protocol driven medical Care by Nurses in Ambulatory Care Setting
9. Redesigned Ambulatory Care into One-stop-shopping
10. Developed multidisciplinary Protocols to improve collaboration between Specialties
11. Developed clinical Pathways to align clinical Care and reduce LOS
12. Developed an Outpatient Services Indicator-system to provide management information for Doctors and Staff to improve their Collaboration and Planning of Capacity adjusted to Demand
13. Partnerships with Nursing Homes and Home Care Services to improve take-over at Discharge
14. Implemented Patient Safety Plan to contribute to reduce LOS (generally applied)

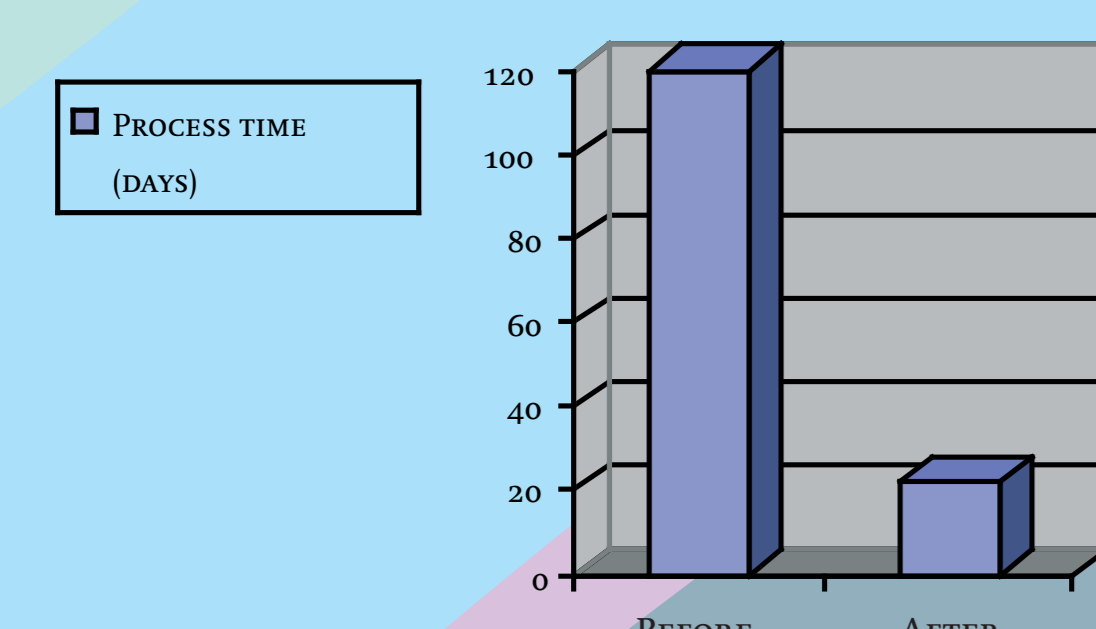
RESULTS

Arterial diagnostics: process time before and after introduction of process scheduling and one stop shopping **4, 5, 6, 7, 8, 9, 10, 11**



Reduction exceeds aim

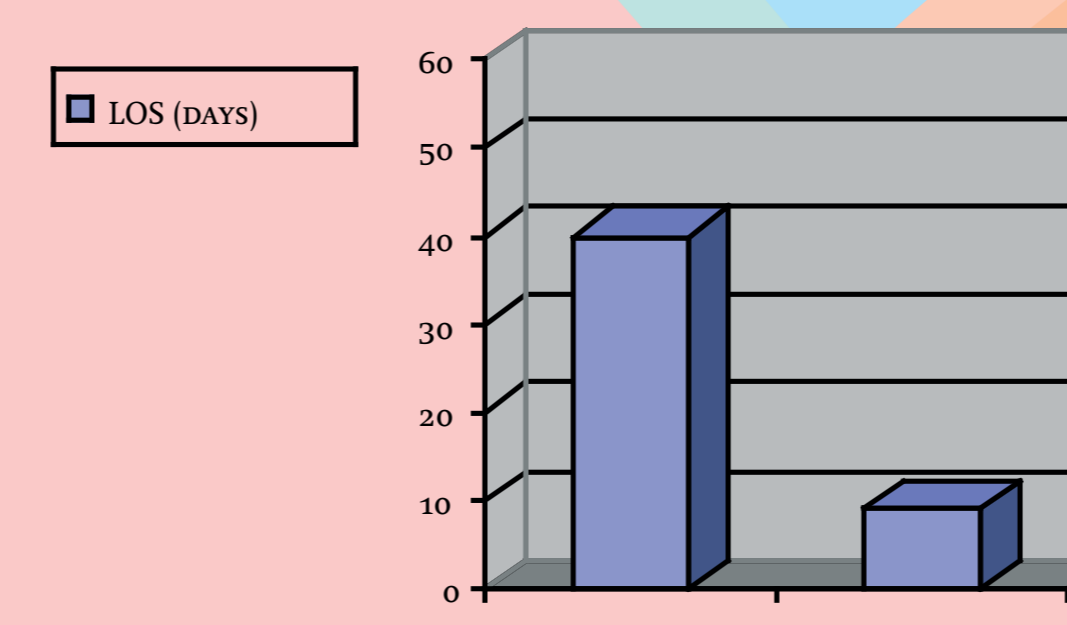
Varices: process time before and after introduction of process scheduling and one stop shopping **4, 5, 6, 7, 8, 9, 11**



Reduction exceeds aim

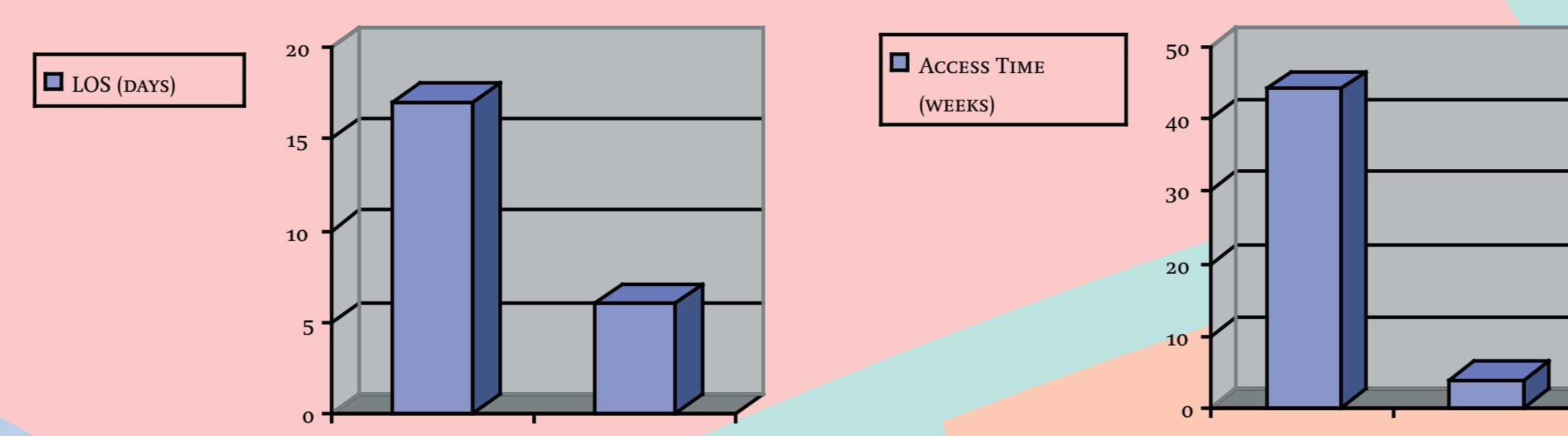
RESULTS

Stroke: LOS before and after realization of Stroke Unit and Thrombolysis **1, 2, 6, 7, 8, 11, 13**



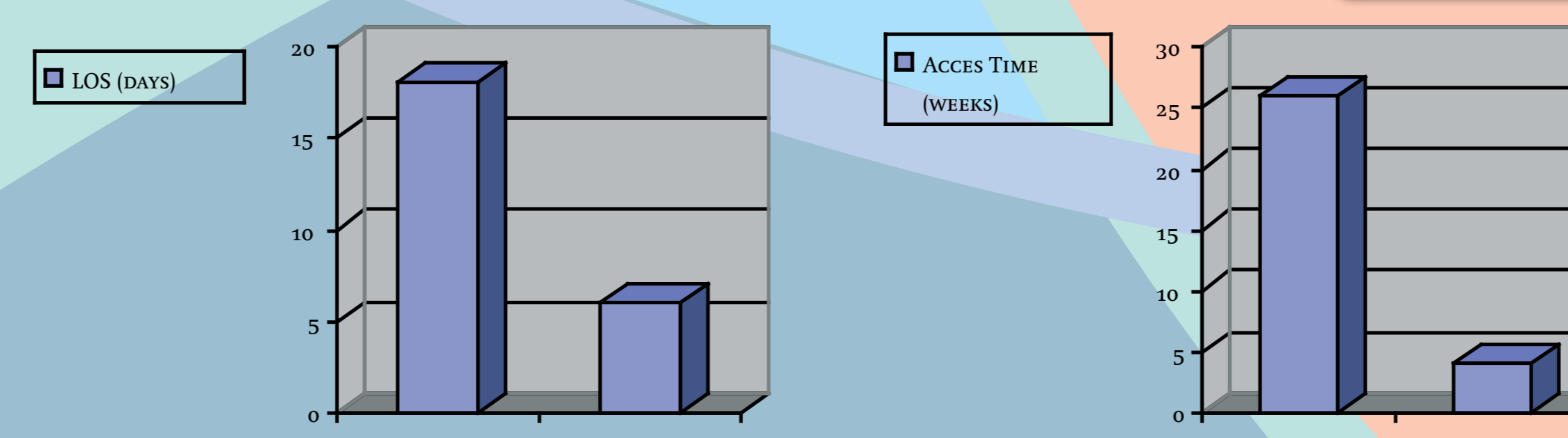
Reduction exceeds aim

Total Knee: LOS and Access time before and after process redesign **4, 6, 7, 10, 11, 13**



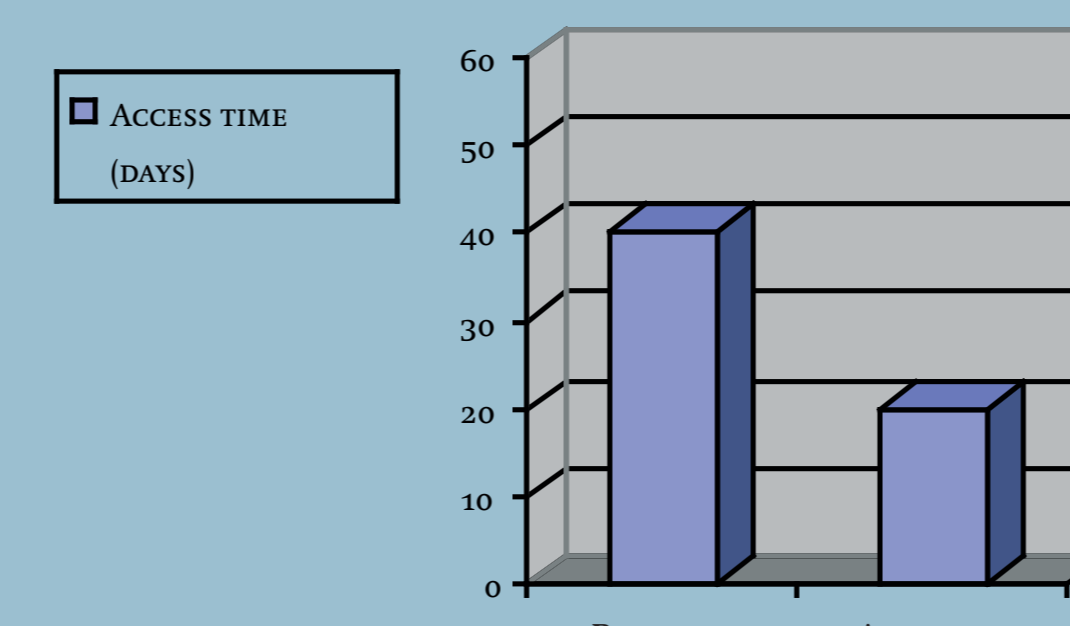
The redesigned program exceeds the aim.

Total Hip: LOS and Access time before and after process redesign **4, 6, 7, 10, 11, 13**



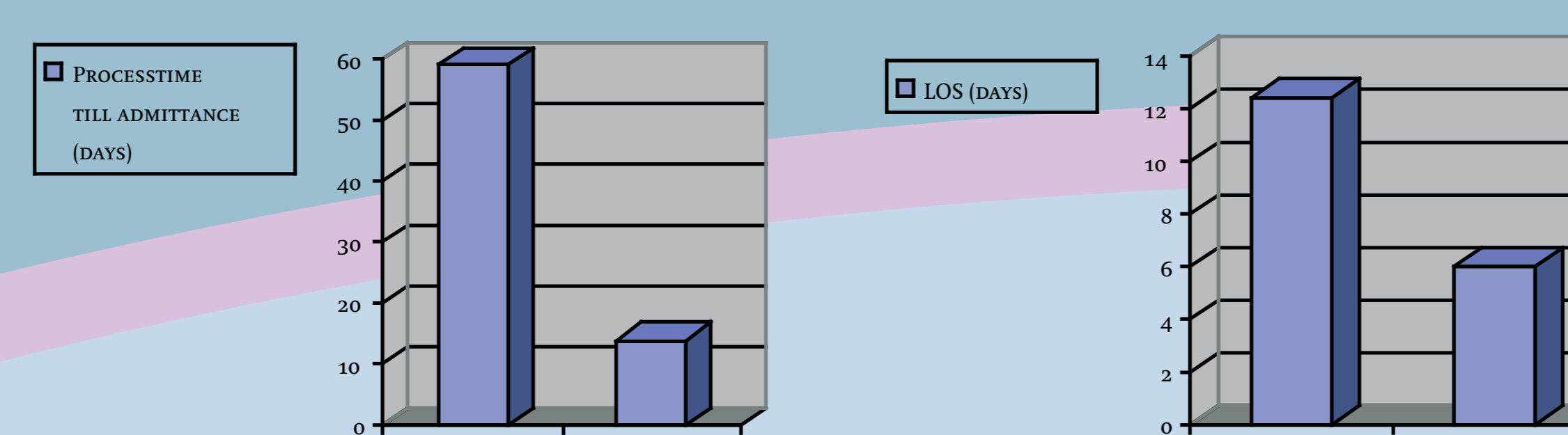
The redesigned program exceeds the aim.

Colonoscopy: Access time before and after realization of Direct Access for primary care physician **2, 3, 7, 9, 12**



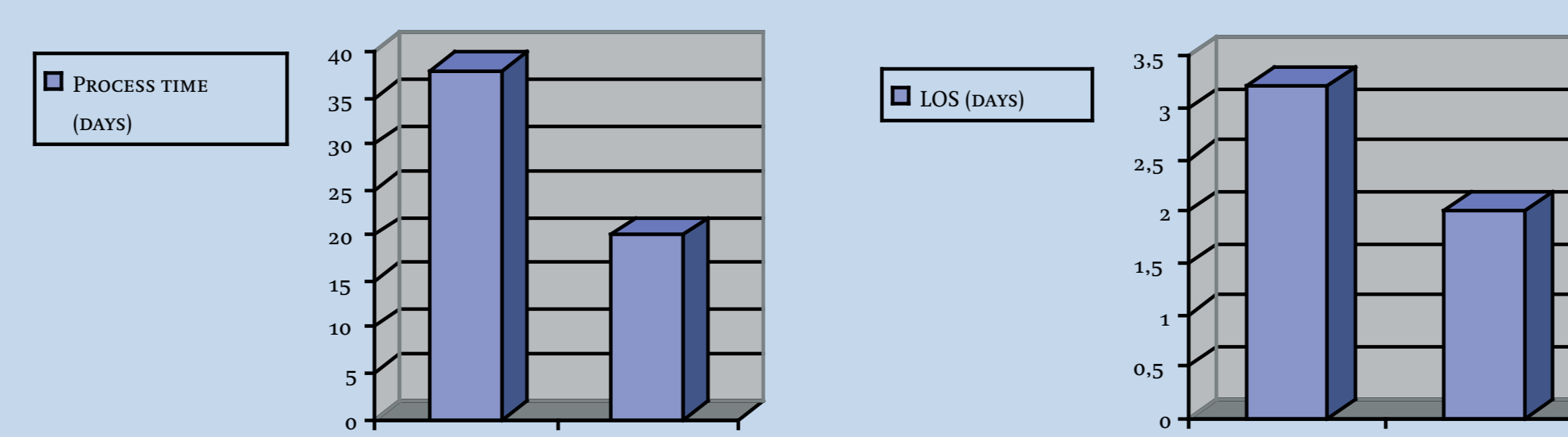
Reduction of 50%. Aim (factor four reduction) not met because of big volume increase.

Colon Cancer Diagnostics & Intervention (prognosis) **4, 5, 6, 7, 9, 10, 11, 12**



Reduction of process time till admittance meets the aim.

Cholecystectomy (prognosis) **4, 5, 6, 9, 10, 11, 12**



Reduction does not meet the aim.

There is a dis-incentive in the reimbursement system for a further reduction of LOS

SUMMARY OF RESULTS / LESSONS LEARNED

Although a factor four reduction could not always be realized Atrium medical center was successful in effectively realizing a dramatic decrease of access and process times in a variety of care processes most relevant to the population served. Even more effectiveness can be added by improving unit logistics and scheduling in central facilities like OR and Radiology and by eliminating dis-incentives in the reimbursement system. An additional finding suggests re-designed processes to be both better performing and more efficient.

- Key process changes are: a decrease of steps, an increase of value added per step and the introduction of process scheduling.
- Key system changes: include the patient, his/her spouse and the GP in the service system rather than delivering services to them. To accomplish this create wins and feedback for well trained and certified GP's and train patients and spouses to empower them as co-producers.
- Always include new insights and technology from the health professions involved. Only the best care deserves the best organization.
- The introduction of a small set of quality indicators at process and outcome level, stimulates team and project learning. This is crucial to achieve goals. To stay on target structural application of quality indicators appears to be necessary.
- The Hospital should have structural and cultural means to gather, disseminate and apply new knowledge and technology, i.e.: a quality improvement competition, a professional innovation center and management contracts including performance indicators.

Process Redesign is key to stay ahead of the Market.

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