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Danish Centre for Evaluation and Health Technology Assessment

# Operation for vaginal prolapse in day surgery

## A health technology assessment - summary

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Operation for vaginal wall prolapse in day surgery – Health Technology Assessment



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# Summary

Operation for vaginal wall prolapse is very common in departments of gynecology in Denmark. The tendency in surgery moves towards more and more treatment done as day surgery.

The purpose with this Health Technology Assessment (HTA) is to investigate, whether operation for vaginal wall prolapse can be done as outpatient treatment.

The result of the HTA shows that outpatient treatment can be introduced without changing the already low complication- and recurrence rates from the procedure and at the same time increase the training opportunities for young surgeons, provide high patient-satisfaction, and savings in health care resources.

Furthermore, the HTA shows the need for analyzing the existing organization before changing to outpatient regime, and a need for involving all personnel, when implementing outpatient regime.

## Background for the HTA

Operations for vaginal wall prolapse using local anesthesia, but hospital admission, were introduced at the Department of Gynecology, Skejby Hospital, in 1998. The admission time for this group of patients was reduced until 2001. The reduction in admission time created the idea of outpatient treatment. Before changing the regime, it seemed essential to evaluate the quality of treatment both in patients admitted to hospital for operation for vaginal wall prolapse, and patients operated in the same way in the outpatient clinic.

The framework of HTA has focused the analysis on the consequences of changing the treatment regime. The project is kindly supported by Center of Evaluation and Medical Technology Assessment.

The results of this HTA are so clear that they ought to be implemented in other gynecological departments in Denmark.

Below, the results and conclusions of the four elements in the HTA-project are summarized.

## Technology

Operation-time was unaltered after changing the operations to day surgery, but the time that patients spend in the operation theatre was reduced. Observation-time after the operation decreased significantly, that was, days were counted when the patient was admitted to hospital, and hours were counted in the outpatient regime. The surgical result after converting to outpatient treatment shows unaltered low frequencies of complications, re-operations, readmissions, and patients' perception of recurrence. The training potential for this very common gynecological operation was improved, as the number of operations done by trainees in surgery was more than doubled after introduction of the outpatient regime.

## Patient

The use of medicine after the conversion to outpatient treatment was reduced. All patients scored their sense of pain low on a visual analog scale, and the patients treated in the outpatient regime scored pain even lower than patients admitted to hospital, although pain perception can be difficult to remember after a long time.

Summary in: Sundhedsstyrelsen, Center for Evaluering og Medicinsk Teknologivurdering. Ambulant operation for nedsynkning i skeden – en medicinsk teknologivurdering. Medicinsk Teknologivurdering 2006; 6(8). København: Sundhedsstyrelsen, Center for Evaluering og Medicinsk Teknologivurdering, 2006. p 13-15. Full length pdf at www.cemtv.dk

Sick leave was similar in the two groups, but the patients in the outpatient regime indicated a shorter period where they felt sick than the patients admitted to hospital. Generally, the patient-satisfaction was high, without differences in both groups.

The level of information in the outpatient regime is acceptable, but the report points out areas that require improvement. Especially the information before the operation, including information about possible problems after the operation, is important. More patients treated in the outpatient regime contact their general practitioner after being sent home, than patients admitted to hospital when operated. There is no difference between the two groups in the frequency that women were re-admitted at hospital for re-operation.

## Organisation

Any reorganization of big groups of patients to outpatient treatment, including vaginal wall prolapse surgery, needs considerations of the organization. We used two organization models to describe the reorganization of regimes, Leavitt's system model and the contribution-/reward model. By using these models we revealed mechanisms in the organization, which we were unaware of before we changed the treatment regime. Due to the lack of insight in the organization, and in the effect of the change to outpatient regime, the process became unnecessarily long. For the same reason the balance in the contribution-/reward model was not always steady.

According to the analyses using Leavitt's system model we learn that the leader of the project has to be a well-defined person, who is known to everyone. The leader of the project solves problems ad hoc, and the personnel can relate to this person. At the same time, the agent of change needs to be aware of creating ownerships of the project, and hand over ownerships to the actors. The actors are directly involved of the change in regime. To the actors, taking part in the process, communication, and engagement are important factors in an organization in the middle of a changeover. The agent of change will become reliable, and the process of changeover will evolve easily. A balance will be achieved in the contribution-/reward model.

## Economics

Analysis of the economics is framed as a cost minimizing-analysis. The results indicate that vaginal wall surgery is about 1/3 cheaper in the outpatient regime compared to when patients are admitted to hospital for the operation. The saving is primarily achieved by reducing costs for hospital stay (hotel costs) and by less use of time in the operation theatre and recovery area so also the staff costs are reduced.

Patients treated in the outpatient regime appear to contact their general practitioner more often than the patients in the inpatient regime. Such additional cost would off-set the savings made on the hospital budget and may shift the costs towards the primary health sector and away from the hospital sector. However, the analysis does not indicate that the costs in the primary sector will overbalance the savings in the hospital sector.

The analysis did not find significant difference in the two treatment-regimes in the period of sick leave among patients attached to the work force. It is therefore suggested, that the two regimes are not different in terms of the length of the time that the patients are on sick leave from work.

## Putting the results into perspective

Vaginal wall prolapse surgery is an obvious option for outpatient treatment. We used local anesthesia, but the same procedure may also be possible to undertake with spinal or general anesthesia.

The advantages in the reorganization are greatest in relation to the effects on the technology and costs, while the two treatment regimes are broadly similar seen from the patient's point of view. As operation for vaginal wall prolapse is one of the most common operations at gynecological departments substantial savings can be made.

Conversion to outpatient treatment affects big parts of the organization. Future changeover to outpatient treatment need to be succeeded by a thorough description of the existing organization, and a model for the new regime has to be chosen.

Key words: day surgery, outpatient treatment, vaginal prolapse surgery, local anaesthesia.

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