

Knee implants Value Based Agreement - Region of Southern Denmark



Context & objective

Region of Southern Denmark: **patient-centered improvement model** with focus on data driven innovation, patient-experienced outcomes & streamlining. Knee replacement is a strategic service

Contract renewal (8 yrs) required for primary knee replacement implants at **Vejle Hospital**. Objective to improve patient outcomes

Clinical and administrative **ownership** within hospital & **involvement** of clinical staff



Tender

Individual **dialogue meetings** with suppliers adjusted and shaped the patient outputs, development, risk sharing & payment parameters

Consultation of draft tender documents with written responses from suppliers further sharpened risk sharing and payment parameters

Open tender completed in early 2018 



Value-based agreement objective

Mitigate risk of new knee implants not delivering value in line with the current patient outcomes



VBA-elements

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Outcome

- Length of stay
- Number of readmissions
- Revision rate within 2 years
- Overall patient satisfaction
- Functional outcome

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Target value baseline defined based on current outcomes

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Metrics being monitored

- Number of primary procedures
- Patient hospitalization time
- Number of readmissions
- Number of revision procedures
- Patient satisfaction (PROM)
- Functional lift (PROM)



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Cohort of patients defined

All patients undergoing primary knee replacement surgery at Vejle Hospital

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Financial specifications

- Prices adjusted based on actual performance (+/- 17% for following year)
- Free knee revision implants to treat patients exceeding the maximum target value or the supplier's promised better revision percentage



Key success factors

Start **market dialogue** well in advance

Well-planned clinical implementation involving all relevant **clinical staff**

Metrics based on **existing data** delivered to national clinical patient databases

Patient outcome parameters	Total knee arthroplasty	
	Baseline	Results 2019
Clinical patient outcome in 2019		
Average patient hospitalization time (in hours)	51,6	46,8
Average patient re-admission rate 30 days after discharge	5,0 %	2,4 %
Average patient revision rate after 1 st postoperative year	1,7 %	N.A.
Average patient revision rate after 2 nd postoperative year	2,0 %	N.A.
Average patient revision rate after 5 th postoperative year	4,1 %	N.A.
Patient reported outcomes in the start-up period in 2018		
	Baseline	Results 2018
Very satisfied reported total outcome 1 year after surgery	65 %	66 %
Satisfied or better reported total outcome 1 year after surgery	85 %	96 %
Very satisfied reported functional lift 1 year after surgery	65 %	60 %
Satisfied or better reported functional lift 1 year after surgery	85 %	95 %