Codebook Barriers and facilitators related to implementation of ERATS

Domain	Code	Code in Atlas.ti	Description of the code
SUGGESTIONS FOR IMPROVEMENT	Suggestions for improvement	Suggestions for improvement F Facilitator B Barrier	This is a field in which we collect all suggestions for improvement, such as improvement for the program or components thereof, the organization, personnel, etc.
1 Broader Context	**Any factor that relates to the broader context in which lung surgery is performed in the Netherlands**		
1 Broader Context	1.1 Communication between Hospitals/HCPs	Communication HCPs F Communication HCPs B	• Everything mentioned with regard to communication between hospitals / HealthCare Professionals (HCPs) • MDO's
1 Broader Context	1.2		
1 Broader Context	1.3		
1 Broader Context	1.4		
2 Patient Factors	**Any factors that relate to the needs, preferences, or behaviour of patients regarding ERATS**		
2 Patient Factors	2.1 Informing patients	Informing patients F Informing patients B	• Various media information (movies / website / folder) • Clear information • Illiteracy • Realistic information • Consistent information HCP team • Managing expectations
2 Patient Factors	2.2 Autonomy patients	Autonomy patients F Autonomy patients B	Everything that is mentioned with regard to the autonomy of the patient

2 Patient Factors	2.3 Situation at home	Home situation F Home situation B	• Anything mentioned with regard to the patient's home situation • Having insight into the home situation
2 Patient Factors	2.4 Age patients	Age patients F Age patients B	Everything that is mentioned regarding the age of the patient
2 Patient Factors	2.5 Physical condition patients	Condition patients F Condition patients B	• Be fit for surgery • Fit is more important than age • Getting fit after surgery
3 Team Factors	**Any factors that relate to the Team delivering ERATS, especially the ability to deliver a care programme as one team, with one message and consistent information**		
3 Team Factors	3.1 inconsistent information team	Inconsistent info team B	• Everyone has their own ways • Colleague tells something different / varying stories
3 Team Factors	3.2 Case manager	Case manager F	• 1 point of contact for the patient • 1 point of contact for the organization • Central organizer/manager
3 Team Factors	3.3 Handover/consultation HCPs	Handover HCPs F Handover HCPs B	• Inadequate referral to pain team • Presence of cross-team consultation • Good handovers between HCPs • Short lines between HCPs • Good cooperation with anesthesiology department • Explanation of the process by lung specialist
3 Team Factors	3.4 contact post-discharge	Post-discharge contact F Post-discharge contact B	• Active: receiving a call after discharge • Passive: having a telephone number to call after discharge
3 Team Factors	3.5 Quality HCPs	Quality HCP F Quality HCP B	• Stricter guidence by physiotherapist • Clear appointments with physiotherapist • Strict and clear guidence by nurses
3 Team Factors	3.6 Work pressure Ward	Work pressure ward B	• Overburdened nurses/limited time

3 Team Factors	3.7 Wilingness to change	Willingness to change F Willingness to change B	• Rigidity by ward personnel • Being early adopters • Initiative for change with the surgeons
3 Team Factors	3.8 Support team leaders	Support team keader F Support team leader B	
3 Team Factors	3.9 Use of patient experiences	Use patient experiences F Use patient experiences B	• Person to share personal experiences with at time of discharge • Periodic reflective conversations with team and former patients
4 Protocol Factors	**Any factors that relate to the ERATS protocol, its materials, evidence for the program.**		
4 Protocol Factors	4.1 concise protocol	concise protocol F concise protocol B	• The old protocol is very extensive
4 Protocol Factors	4.2 Flexibility within bandwidth	Flexibility within bandwidth F Flexibility within bandwidth B	• Prior arrangements with anaesthesiology • Room for flexibility within the protocol • Possibility to personalise treatment within constraints of the protocol • Protocol = basis; individualising is a possibility.
4 Protocol Factors	4.3 Logistics time MDT-operation	Logistics time MDT-operation F Logistics time MDT-operation B	• Limited time for preparation by physiotherapist/dietician • Rigid guideline regarding time between MDT-Operation • Limited time between intake-operation
4 Protocol Factors	4.4 knowedge of the protocol by HCP	knowedge of the protocol by HCP F knowedge of the protocol by HCP B	• Not all HCPs know the perioperative protocol.
4 Protocol Factors	4.5 Variation protocols/old protocols	Variation protocols/old protocols F Variation protocols/old protocols B	• Old situation: every speciality has their own protocol
4 Protocol Factors	4.6 Minimally invasive surgical technique	Minimally invasive surgical technique F Minimally invasive surgical technique B	• Strive for a minimally invasive technique

4 Protocol Factors	4.7 Protocol discharge criteria clear	Protocol discharge criteria clear F	• Electronic chest drain systems are sometimes hard to interpret • Pain and airleak are important factors for LOS • Clear discharge criteria • Data electroic drain system as input for clinical decisions
4 Protocol Factors	4.8 Protocol pain management clear	Protocol pain management clear F	• Pain management without catheters • Urinar catheter/epidural limit mobilisation • Variety of methods in pain management • Pain immediatly postoperatively • Pain and nausea limit recovery
4 Protocol Factors	4.9 Limited support Transfer hospital - home	Limited support Transfer hospital - home B	• Preparing for the influence of the operation on the situation at home • Uncertainty regarding breathing after discharge • Availability support in transition hospital-home • Support from social services
5 Hospital Factors	**Any factors that relate to the abilities and organisation of the hospital that influence the implementation of ERATS.**		
5 Hospital Factors	5.1 Workload Data registration	Workload Data registration B	• Workload national audit data gathering • Data registration not directy from EMR
5 Hospital Factors	5.2 Logistics MDT - operation	Logistics MDT -operation F Logistics MDT -operation B	• Intake process with a departments invoved • Monitoring & managing time between MDT and Operation • Week planning: planning opertions reated to MDT date • Clarity on operation date • Support from vounteers during intake process • Patients want tob e operated on as soon as possibe
5 Hospital Factors	5.3 Added value data feedback	Added value data feedback F Added value data feedback B	• Limited motivation for data registration (without data feedback) • Imited to financial data • Data feedback can improve care • Feedback data/3months

			• Irregular feedback from national audit programme • Benchmark
5 Hospital Factors	5.4 Support for innovation by management	Support for innovation by management F Support for innovation by management B	• Support from departmental management • Support from quality improvement officers
5 Hospital Factors	5.5 Complete dataset for ERATS	Complete dataset for ERATS	• No estabished PROMS set • No data feedback
6 Surgeon factors	**Any factors that relate to the Surgeon performing the lung resection and providing perioperative care**		
6 Surgeon factors	6.1 Experience surgeon	Experience surgeon F Experience surgeon B	• Experience HCP (number of operations performed/number of patients treated)
6 Surgeon factors	6.2 Presence/availability surgeon	Presence/availability surgeon F Presence/availability surgeon B	• HCP/Surgeon availabe at the bedsise • Sufficient time for patient education • Communication HCPs-patient • Consultation by the surgeon at time of discharge
6 Surgeon factors	Empathy HCP	Empathy HCP F Empathy HCP B	