

Table 3 Data collection of process evaluation

Focus	Assessment	Measurement point
Domain – Context: In which context and setting does the intervention take place? What are the determinants of implementation?		
<i>Hospital level</i>		
Hospital baseline data on organisational-structural conditions, e.g.: <ul style="list-style-type: none">- Organisational structures and processes- Organisational culture- Organisational Readiness for Implementing Change	Written survey: key person at the hospital (e.g. management, project manager)	Control phase
Staff baseline data on organisational-personnel readiness, e.g.: <ul style="list-style-type: none">- Professional background- Interprofessional collaboration- Organisational Readiness for Implementing Change- Acceptance and Use of Technology	Written survey: pharmaceutical and medical staff	Control phase
<i>Patient level</i>		
Patient baseline data, e.g.: <ul style="list-style-type: none">- Socio-demographic data- Previous experience with MTM and components of the TOP intervention	Written survey: enrolled patients	Shortly after discharge from hospital (t0)
Domain – Context: What factors inhibit or promote implementation of the intervention? How is the intervention implemented in health care practice?		
<i>Hospital level & Patient level</i>		
Inhibiting and promoting factors	Document analysis	Transition and intervention phases
<i>Hospital level</i>		
Implementation status, e.g.: <ul style="list-style-type: none">- Status of technical implementation- Status of implementation of TOP processes	Document analysis	Transition and intervention phases

Domain – Recruitment: Who receives the intervention?		
Hospital level		
Data on representativeness, e.g.: <ul style="list-style-type: none">- Structural variables of alternative hospitals	Data extraction with survey form	Control phase
Participation information, e.g.: <ul style="list-style-type: none">- Reason for participation- Implementation policy and practices, resources- Tension for change, public needs (CFIR)	Interview: key person at the hospital (e.g. management, project manager)	Transition phase
Patient level		
Data on the recruitment process, e.g.: <ul style="list-style-type: none">- Number of consents	Document analysis	Control, transition and intervention phases
Domain – Implementation: Is the intervention implemented and applied in principle, as planned? To what extent is the intervention implemented and applied?		
Hospital level		
Implementation process and implementation outcomes, e.g.: <ul style="list-style-type: none">- Appropriateness, feasibility, acceptability- Implementation of intervention according to standard, adaptations to the interventions- Fidelity, dose, reach	Written survey: pharmaceutical and medical staff	Intervention phase
	Document analysis	Transition and intervention phases
Patient level		
Implementation process and implementation outcomes, e.g.: <ul style="list-style-type: none">- Perception and evaluation of intervention components such as contact with pharmacist- Reach, dose	Written survey: enrolled patients	Shortly after discharge (t0) and approximately 90 days after discharge (t1)
	Document analysis (software data)	Intervention phase

Domain – Mechanisms of impact: How is the intervention accepted by those involved? What are the unintended consequences and how are they to be evaluated?		
<i>Hospital level</i>		
Response, e.g.: <ul style="list-style-type: none">- Intervention evaluation and attitudes towards TOP intervention- Interprofessional collaboration- Use of intervention in work routine (normalisation process)	Interview and written survey: pharmaceutical and medical staff	Intervention phase
	Document analysis (software data)	Intervention phase
<i>Patient level</i>		
Response, e.g.: <ul style="list-style-type: none">- Attitudes to and experiences of TOP intervention	Interview: subsample of enrolled patients	After discharge from hospital, Intervention phase
Domain – Effectiveness: How effective is the intervention, as perceived by the participants? How are the results to be interpreted in relation to the targeted outcome parameters (primary and secondary outcomes)?		
<i>Hospital level</i>		
Sustainability, e.g.: <ul style="list-style-type: none">- Organisation-related expectations of the intervention met- Intentions for continuation	Interview: key person at the hospital (e.g. management, project manager)	Intervention phase/follow-up phase
Reflection of the implementation process	Interview: inter-hospital group of experts	Intervention phase/follow-up phase