Supplements

Supplement 1:

Comparative illustration of the established "old" processes and innovations using online video consultation in the follow-up of patients after inpatient treatment (placement marked in red).

Supplement 2:

Comparative illustration of the established "old" processes and innovations using online video consultation for the initial presentation of patients to specialists by general practitioners (placement marked in red).

Supplement 3:

Comparative illustration of the established "old" processes and innovations using online video consultation for the re-presentation of patients to specialists by general practitioners (placement marked in red).

Supplement 4:

Analysis of the existing online video consultation project according to the 7 factors with the central questions in process management formulated by Stöger.

Supplement 4

Result orientation
Are there measurable and controllable results for each process?
As part of the pilot study, evaluation data was collected for the advised processes, which is now available as results.
Are there clear objectives?
For OVC applications, the objectives are clearly defined with indication-based digital replacement of in-person outpatient presentations.
Are the definitions of the objectives comprehensible and built into the control systems?
The definitions of the objectives are comprehensible and the control systems are specified by medical ethics and legal frameworks.
Can specific deliverables be designated for each process?
Yes, the service is ultimately the preparation of a physician's report after a telemedicine consultation has taken place.
Customer focus
Is the process evaluated by the customers?
While the pilot project provided a constant evaluation of the participating patients and troop physicians, this was no longer planned for the continuation of the project. The reason for this was that the effort involved in the evaluation survey was perceived as disruptive in some cases. In the future, evaluations among the patients will be planned according to their needs and as part of regular feedback rounds with the GPs.
Is there a definable customer group?
Yes, the customer group can be clearly delimited by the affiliation of the patients with the German Armed Forces and narrowing down specific issues.
Do competitors and competitive processes exist?
Due to the structure of the Bundeswehr, there are hardly any competitors. The process itself does not have competition in its current form but is an integral part of the processes.
Does the process logic also correspond to the customer's thinking?
Yes, the logic of the processes corresponds to what the patients are used to or how the process is given to them. The digital version of these processes is new, but due to the voluntary nature of its use, it is not considered disruptive.
Contribution to the whole
Can upstream and downstream processes be clearly identified?
Due to the processes already being implemented and established in everyday clinical practice (patient presentation, diagnostics, conservative vs. surgical procedures, follow-up care), all the processes that are involved can be clearly identified.
Can the contribution of the individual processes to an overall result be determined?

Due to clearly delimitable processes with their own documentation (outpatient letters, discharge letters, rehab reports, etc.), the contributions can also be clearly identified.
Are there opportunities for rationalization by combining the processes with subprocesses?
In perspective, individual steps in which the personal presentation of patients would not be absolutely necessary can be saved. However, care must always be taken to ensure that this is justifiable from a specialist's point of view and must not be to the patient's disadvantage.
Does the process orientation prevent a fragmentation of forces or promote concentration?
Yes, the project can bundle and concentrate forces. The concentration on fixed OVC days in the outpatient clinic will also serve this purpose.
Controllability, measurability, assessability
Is there systematic feedback on the controllability, measurability, assessability?
While in the pilot study feedback on the processes of OVCs were provided by both physicians and patients, in the future, only a fixed evaluation of each case by the performing specialist of the outpatient clinic is planned (in order to maintain quality control on the one hand, and on the other hand, not to impair the processes by the obligatory evaluation of all parties involved in each case.
Are the tasks, competencies and responsibilities clearly defined?
In the pilot phase, these points were clearly regulated within the study team. While they currently still exist, it is foreseeable that the further training and recruitment of nursing and medical staff should take place in order to secure the continuity of task fulfillment (especially appointment allocation and planning, implementing OVCs).
Is it possible to allocate costs, people and services to the process without overlap?
Yes, due to the individual documentation of each case, an overlap-free assignment of each OVC is clearly possible. Theoretically, the respective working time of the physicians involved can also be clearly calculated accordingly.
Repeatability, routine
How does the process begin; how does it end?
The process of an OVC begins with the scheduling of an OVC by the attending GP or an inpatient approaching the respective ward physician (or scheduling at the suggestion of the attending specialist) and ends with the completion of the documentation of an OVC and its transmission to the GPs providing further treatment.
How high is the standardization at the processing and control level of a process?
While the content of each OVC is individualized, the control level of scheduling, link sending, dial-in of patient/physician can be standardized very well (but depends on the technical devices and internet connection).
How high is task diversity and its representation in the processes?
In this process currently under consideration, the variety of tasks is low, as they are clearly defined. However, follow-up decisions (e.g., unplanned further examinations) can expand the range of tasks for patients and physicians.
How durable is a process once it is "adjusted"?

The indication for OVCs is determined individually depending on the patient's case. As a process itself, OVC is now permanently implemented if indicated (with the standing option to change the process).
How homogeneous is a process in itself?
From a purely procedural point of view, with scheduling - sending links - online dial-in of the physician/patient - online contact - end of the OVC - documentation completion, every OVC is homogeneous.
Responsibility
Is the responsibility per process and subprocess on one person?
Ultimately not: The OVC scheduling is determined by the unit physician (GP) or surgeon/physician at the hospital. It is desirable, but not always feasible, that the OVC is then also performed by the same physician.
How do information sharing and communication work?
It is important that the information about an OVC scheduling takes place separately from a doctor's letter in a separate documentation (e.g., in the electronic hospital information system, HIS). In the future, patients should be informed of the fixed date and time of the OVC upon discharge and an entry should be made in the KIS at the same time. Similarly, a reservation should also take place when an appointment is booked by a unit physician. The missing interface between the booking portal and the HIS should be addressed in the interim.
Are people interchangeable in principle?
In principle, yes, with the retention of known physicians being a relevant variable for patients both on the basis of literature sources and from their own experience to date in the pilot project.
How high is the dependency on individual persons (regarding knowledge, experience)?
Physicians should have gone through the process approximately 3 times before they perform OVCs independently (not for technical reasons, but to anticipate or be able to address technical issues, for example, in the case of poor quality of dial-up)
Can the responsibilities be transferred to existing organizational units?
This is, at least, the perspective goal, which is that OVC use should be able to occur in other hospitals or other disciplines within the health care enterprise.
Manageability
How pronounced is the implementation orientation in the individual processes and in the network?
The implementation orientation currently still depends heavily on individual persons and their insistence on scheduling an OVC (including the implementation). The use and booking of OVCs by unit physicians cannot be influenced. In the future, the process should be completely independent of the individuals, at least on the part of the clinic/outpatient department.
Are both the processing level and the control level mastered?
The processing level has already been tested. The control level is now being established as a follow-up to the pilot project, with fixed office hours for online video consultations.
Can a process also be planned and controlled individually?
The planning of individual OVCs can be planned and controlled individually.