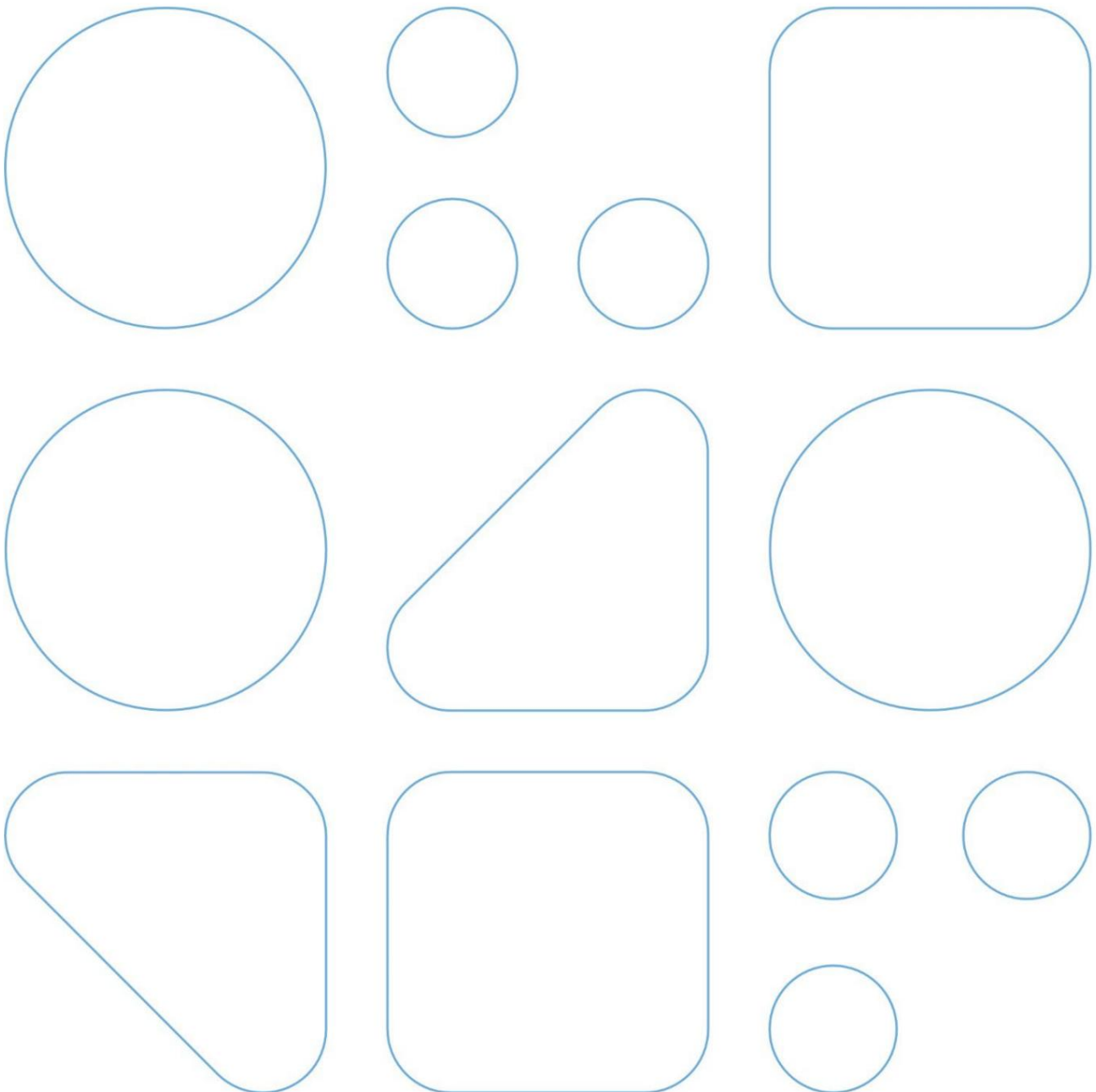


Sub-plan 2: Acutely and critically ill patients

2022-2026

20.04.2022



Development plan 2040

Sub-plan 2: Acutely and critically ill patients

This plan is one of nine sub-plans under [Development Plan 20240, which describes Akershus University Hospital's \(Ahus\) main goals and plan for the development of the hospital up until 2040](#). The sub-plans describe specific projects and development initiatives that are planned for the next four years. The partial plans are rolled out and updated annually, as part of the company's prioritization and budget process.

Nine sub-plans have been drawn up:

Subplan 1: The elderly patient

Sub-plan 2: Acutely and critically ill patients

Sub-plan 3: Cancer

Sub-plan 4: Mental healthcare and substance abuse treatment

Sub-plan 5: Children and young people

Sub-plan 6: Competence and education, recruiting and retaining

Sub-plan 7: New tasks and further development of patient services

Sub-plan 8: New work processes and technology

Sub-plan 9: Research and innovation

About the investment area

Ahus has a large and growing admissions area and is Norway's largest emergency hospital. The hospital accepts relatively few critically ill patients, but a large volume of acutely ill patients.

All critically ill patients are treated at Nordbyhagen, while patients with urgent needs are received at Nordbyhagen and Kongsvinger. On average, 120-130 patients per day come to the emergency department at Nordbyhagen. There is also a significant influx of patients to emergency psychiatric reception. In addition, separate receptions have been established linked to the children's and youth clinic and the women's clinic, as well as an orthopedic emergency outpatient clinic. The reception at Kongsvinger Hospital receives 30-40 patients per day. All patients, including the elective ones, draw on the same resources.

Acutely and critically ill patients have some typical characteristics:

- They hit the "hub" in the hospital, and there are many interfaces and dependencies. • The patient group has great complexity.
- Time is an important factor.
- There is great breadth and variation from the obviously critically ill to an undetermined patient who can be acutely ill. For many patients, time is therefore required for observation.
- There is a large volume of patients, of which only a few are very demanding on resources. Nevertheless, the overall workload is very large.

Challenge picture for the next 4 years

Ahus is often referred to as Norway's largest emergency hospital. There is a need to define what goals the healthcare organization should have for the patient service within this important and demanding part of the business, and to look more closely at the arrangement of the service. Among other things, it is about dimensioning the capacity, as well as what requirements should be placed on preparedness and logistics. By setting up a framework for what the emergency hospital should be, it will be easier to assess the need for space and functions at the various treatment sites.

With population growth, increased pressure is placed on capacity. The experience in professional circles is that the need for restructuring comes faster than it is actually possible to carry it out. As a result, the capacity for a number of critical functions, such as the emergency department, central surgery, intensive care, monitoring and anaesthesia, has become very strained. Furthermore, there are often critical operations in the emergency department at Nordbyhagen. The pressure on bed capacity is well felt throughout the hospital, and there is a great need to clarify more patients in reception. The demanding operation also has additional effects on cross-cutting services, particularly anaesthesia.

The possibility of treating an increasing number of patients with new and better treatment methods is important, but at the same time it puts increased pressure on the total capacity. An increasing degree of specialization within the emergency services creates new challenges, particularly during on-call time when a wide range of incidents and situations must be resolved. There is a great need to practice emergency incidents so that the employees can be as well prepared as possible. This includes increased use of simulation, interdisciplinary training and trigger-based training.

With more and more concurrent challenges linked to elective and emergency treatment, at the same time as the overall pressure is increasing, it is important to succeed with holistic planning of capacity. Particularly in the surveillance and intensive care area, it is demanding to use the staff and land resources to the full.

It is necessary to bring about even better collaboration between divisions and clinics that have acutely and critically ill patients. During on-call time, the vulnerability is great, both in terms of the number of people present and expertise.

There is strong competition for and lack of specialist expertise. This particularly applies to intensive care nurses, anesthetic nurses and midwives. At the same time as there is a growing need for healthcare personnel, it is expected that the gap between demand and available competence will only increase in the future. When plans are made for the development, this challenge must be taken into account.

There is a need for a more holistic personnel policy, and a strategy for retaining competent staff.

Several possibilities should be investigated in more detail, including shared positions between several units, getting more people with special skills to work every third weekend and refining functions.

Ahus has active development work in many specialist areas. Development of the business at the same time as strenuous operations is demanding. It is therefore necessary to clearly prioritize what needs to be done in addition to ordinary operations. The lag after the corona pandemic has made these challenges more apparent.

Another challenge is that when planning new offers, the necessary "support services" and sufficient area are not always considered. The consequence is that these are not similarly prepared and ready to handle the consequences of new offers. It is important to involve all affected functions in the development projects.

Goal setting

It is crucial that the services that acutely and critically ill patients need are consistent and properly dimensioned. It is crucial that the services function satisfactorily throughout the entire emergency chain.

Well-designed services with a high level of patient safety and security 24/7 are the public's safety when accidents happen or sudden illness strikes. This means, among other things, that emphasis must be placed on the following:

- The employees experience the necessary room for action to provide emergency medical help. Preparedness must then be an important activity in itself, so that an understanding is formed that necessary preparedness also means that resources are either available at all times or can be released immediately.
- Strengthen common unity and cooperation across the divisions • More dynamic solutions in case of strained capacity, as well as use of the capacity across
- Sufficient competence and reduce vulnerability on duty. The professional communities should also be involved here to define a standard that is "good and sufficient enough"
- Simple solutions that work just as well in normal operation as in strenuous operation
- Clarify more people in reception, avoid unnecessary admissions •

Gradual development and putting positive changes into operation. Development work is stressful for employees in the clinic, and is in addition to the main job. It is therefore important to limit the scope of simultaneous change processes. It is central to ensure implementation and achieve noticeable effects. All changes should be well prepared with an emphasis on clinical and practical aspects relationship. All changes should have a clear goal to avoid changes for the change's own sake.

What has been achieved so far

Project title	Results (key words)	Commenced year	Implementation year
Surgical intermediate and similar operation weekday weekend	Four beds put into operation. Two beds from Friday at 15 until Monday morning	2018	2019
Emergency department	Clarification unit for internal medicine patients put into operation. Piloted for surgical patients Established and strengthened competence at the front Revised and evaluated new routine for the medical team and doctor in reception Tested out zones and nurse-doctor teamwork in the emergency department Revised procedure Critical operation, established separate ascom call Joint daily start-up meeting for doctors Improved flow to bed post	2019	2021
Child supervision	Fire senger i drift.	2019	2020
Trombectomes	Day service (08.00-16.00) from 16.09.19. The day service has been extended to 18 from 6.9.21 24-hour operation is planned from 1 February 2022. Gradual escalation between 1 January and 1 February	2019	2021
PCI	Day care PCI has been established Stepping up to day care PCI at Nordbyhagen from 18.1.2021 and STEMI emergency services until 20.00 weekdays. Business transfer of cardiology from LHL 1.1.21	2018-2021	Continued in operation Followed up by the line
Kongsvinger phase 3	Changed patient flow for island aid patients from Ullensaker and Eidsvoll Investigation report	2019	Commissioned 2.3.2020
Anesthesia	completed. Established new duty team LIS and strengthening of an.spl. (LIS 4 nights per week was established in January 2021. A further increase to 3 LiS on duty throughout the week is planned from February 2022. In addition, funds were allocated for an increase from 4 to 5 anesthetic nurses at night from spring 2022). Revised team call where secondary guard participates on indication	2019	Followed up in the line
Joint emergency trauma and CPR committee	Established a joint acute trauma and CPR committee.		
Ahus Gardermoen, DP1 surgeon	Established operational activities for five-room operation Monday-Friday, as well as joint bed post with the Medical Division	2020	2021
Mapping of operational capacity	Mapping of the current situation completed	2021	2021
Joint emergency department KK	Localization and organizational model clarified.	2019	2022

Plan for the period 2022-2026

The plan is a continuation of ongoing work for acutely and critically ill patients. As shown in table 1.3, extensive development work has been initiated in several divisions and clinics, in order to provide the best possible offer to vulnerable patients.

In the first part of the period, emphasis is placed on finding good solutions for the overall operating capacity, continuing the work to strengthen the emergency department, implementing the agreed strengthening of anesthesia services, and implementing other projects that are underway. These are measures that will have clear effects and strengthen the overall service offering for the acutely and critically ill patient.

The work with child reception and critically ill newborns is mainly anchored in the sub-plan for children and young people.

Several specialized services such as PCI and thrombectomy are in the establishment phase. These will, when they are fully implemented, contribute to creating holistic services for a group of patients with acute illness.

Throughout the planning period, work will be done on the structure of the emergency hospital in order to be able to plan the scope and dimensioning of the offer Ahus will have within this area. The work is also connected to the sub-plan for mental health care and substance abuse treatment. The need for an overall dimensioning of services that ensures a consistent capacity for the acutely and critically ill patients is not yet sufficiently addressed in the individual projects.

It is planned to establish a program board with overall responsibility for direction on the development of the overall offer for acutely and critically ill patients. The program board will investigate how the company can achieve an overall consistent and sufficient capacity. The work is used as a basis for new measures to counteract bottlenecks and achieve the best possible services in, for example, intensive care and monitoring, surgery, anesthesia and emergency departments. For this reason, the intensive project is split in two, with one run for staffing solutions, and one run that is included in the overall approach to dimensioning and capacity.

Cooperation with municipalities and districts on overall processes Through

an assessment of overall capacity, it is important to look at which patients must be treated at the hospital, and which should be treated in the first line. As a result of population growth, it is expected that there will also be great pressure on capacity in the future. All patients who can be treated outside the hospital must be treated outside. There is close cooperation with the municipalities to create good patient processes. One of the most important measures is to prevent admission where the patient will be able to receive better adapted follow-up outside hospital. Both home-based services, municipal acute inpatient units and short-term stays in nursing homes are offered to patients based on their needs.

At the hospital, the emergency outpatient clinic works preventively by clarifying patients in the emergency department, and agreeing further follow-up with the patient, GP and the municipality. For patients with a chronic illness, it may be relevant to use digital home monitoring in collaboration with the municipality, to prevent the need for emergency admission arising. In the further development of the healthcare community, efforts will be made to strengthen cooperation regarding patients, so that the offer is experienced as coherent for patients and relatives. Technological solutions that support seamless treatment across the levels of care will be necessary tools to achieve this objective.

How the measures can provide increased quality and patient safety

Through a holistic arrangement of the provision for acutely and critically ill patients, what constitutes immediate help must be defined. This provides increased security for patients to receive the right help at the right time. New work processes and good flow will contribute to better utilization of the overall capacity, increased security among healthcare personnel and better patient experiences. A central measure will be work on the correct placement of patients in intensive care and monitoring, so that everyone receives treatment in line with their specific needs.

With new routines for pre-operative preparations, for example the introduction of mandatory fields in the operation registration form (green form), it will be easier to carry out the procedures correctly.

Targeted strengthening of competence at the front in the emergency department will contribute to quicker clarifications and prevent patients from being left lying around for a long time waiting for help.

How diversity and migration health must be safeguarded A good

patient course requires that the patient is well informed about what the treatment entails, what the patient must do before they show up for planned treatment, and not least that they know when and where to show up.

Some postponements of operations are due to patients not showing up for the appointment, showing up at the wrong treatment location or not having understood what they have to prepare for, such as meeting fasting. This is a challenge for Ahus, where many of the residents in the admission area do not have Norwegian as their mother tongue. Norwegian-speaking patients may also have problems understanding written information sent out from the hospital as a result of their life situation or health conditions.

Several professional communities have therefore already begun work on revising notices of appeal, in order to make the information easier to understand. The work on further development of patient information must ensure that the information is easy to understand and available in relevant languages.

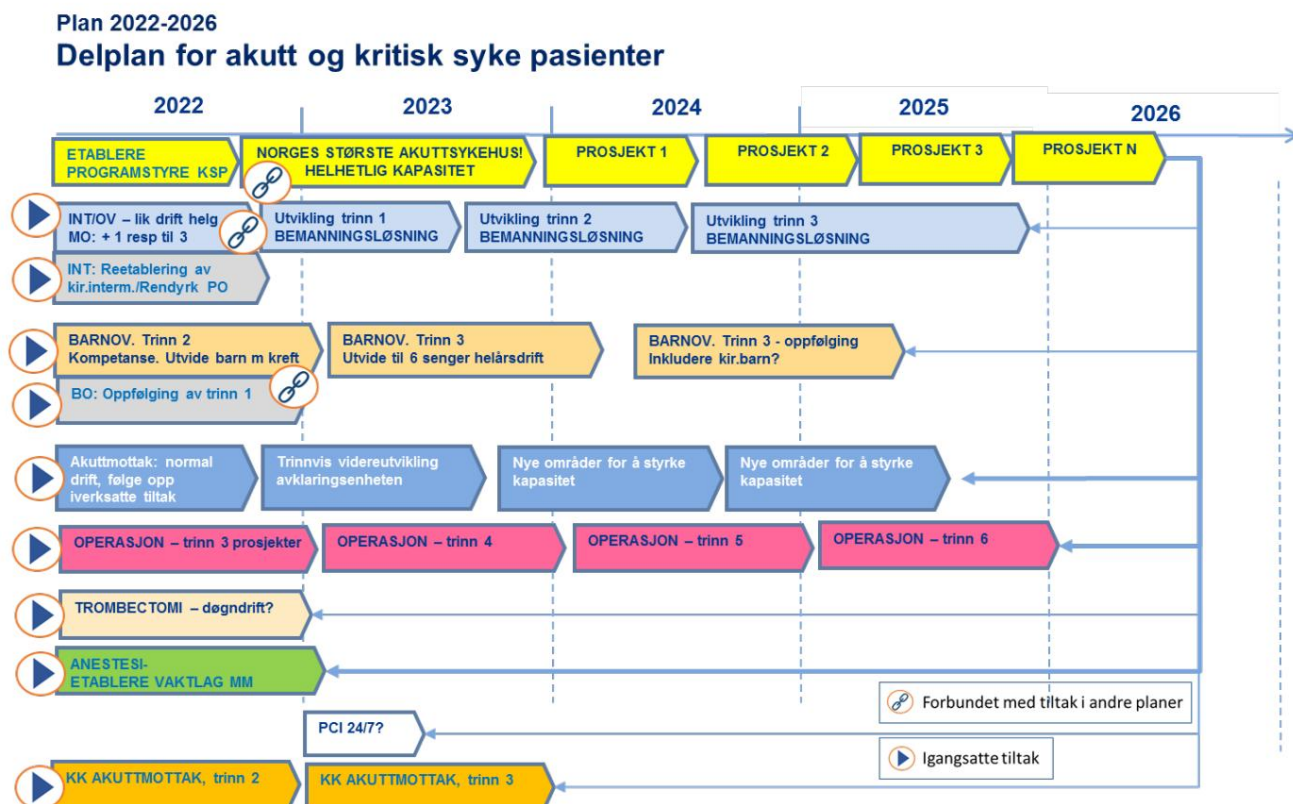
Overview of planned projects and measures

Goal	Planned measures in the period	What to do in 2022	What it takes to succeed
<p>Preliminary project operational capacity (project under the auspices of KD, OK, KK)</p> <ul style="list-style-type: none"> Operational capacity Houses are used in the best possible way Ensure that patients receive the right treatment at the right time, especially cancer and emergency care Have operational capacity that enables compliance with cancer package procedures Identify other significant conditions that affect operation and operational capacity 	<p>Step 2: workshops to share challenges and assess alternative solutions will be organized in autumn 2021</p> <p>Step 3: implement decided solutions from spring 2022 through own projects</p>	<p>Step 3: implement decided solutions from spring 2022</p> <p>Collaborate and contribute into the concept phase New cancer and somatic building</p>	<ul style="list-style-type: none"> Holistic perspective, across locations, professional environment and professions Those affected have ownership of the chosen solutions Processing time for major changes Thorough information work Follow up the work until measures are well established in practice
<p>Project Emergency Department (Hospital-wide)</p>	<ul style="list-style-type: none"> Resumed normal operation in emergency outpatient clinic /clarification unit and completed study phase 1 for further development of the unit Established chir/ortho zone in the emergency department Resume collaboration meetings in all subject areas Gain experience with the new capacity board, team calls and EQS procedure critical operation Investigate solutions for special patient groups 	<p>Discontinue covid 19 operations</p> <p>2021-2022</p> <p>See woe. column</p>	<p>Discontinue covid operation</p> <p>Participation from the surgical professional community in building up the chiropractic/ortho-zone, including increased outpatient treatment of chiropractic patients and faster clarification of these</p> <p>Ownership of the professional pillar</p>
<p>Project joint emergency department KK (followed up by KK)</p>	<p>The aim is to create a joint 24/7 emergency department for gynecology and obstetrics at Nordbyhagen to improve patient safety, patient flow for initiated births and to get a better overview and coordination of capacity in the evening, night and weekend.</p> <p>Localization and organizational model have been clarified.</p>	<p>January - April: Work flow and patient flow are clarified at a detailed level. The conversion process is carried out. Reconstruction of premises on the 5th floor. April-June: gradual implementation</p> <p>September: Full drift</p>	
<p>Child supervision project (followed up by BUK)</p>	<p>Continuous skills development, doctors and nurses (2022)</p> <p>Expand the offer including children with cancer (2022)</p> <p>Start-up phase 3 to 6 beds BO year-round operation, as well as investigation and inclusion of children with surgical problems (2023)</p>	<p>Handle RS situation autumn/ winter 2022</p> <p>See other woes. column</p>	<p>4th wave covid ended including RS children</p> <p>Recruitment/ competence</p> <p>Increased cooperation between adults and children and between the divisions</p>
<p>Project Intensive/monitoring (hospital-wide)</p> <p>The project is divided into two:</p> <ul style="list-style-type: none"> Dimensioning of services is included in an overall work called "Norway's largest emergency hospital" 	<p>Part A: Sizing:</p> <p>A. Determining the necessary capacity int/ov Ahus (2021-2022)</p> <p>B. Determining long-term needs</p> <p>C. Differentiation of capacity/year</p> <p>Part B. Staffing Solutions to Address:</p>	<p>See woe. column</p>	<p>Get over covid</p> <p>Reestablishment of intermediate surgical beds</p> <p>Get experience of short-term measures (1 September-Easter 2022) so that this can be taken into account further in the long-term work</p>

<p>Staffing solutions in the short-medium-long term.</p> <p>The work builds on experiences from the Operations Committee and is led by HR in collaboration with the operating committee</p>	<p>D. Same operation weekend as weekday (22-25)</p> <p>E. Further develop the intensive care and monitoring capacity (22-25) – link here also to part A</p> <p>F. Available reserve competence (22-25)</p> <p>G. Adequate respiratory competence MO (22-23)</p> <p>Increase by 1 seng (2022) 1 seng (2023-2024)</p>		<p>Achieve equal weekday/weekend operation</p> <p>Holistic approach to problems and solutions</p>
<p>Project thrombectomy</p>	<p>It is planned to have extended opening hours during the day until 18 from 6.9.21, and 24-hour services are planned from 1 February 2022.</p> <p>Gradual escalation between 1 January and 1 February</p>	<p>24-hour offer</p>	<p>Competence</p> <p>Training/simulation the entire loop</p> <p>The anesthesia department has capacity</p>
<p>Anesthesia (followed up by KD)</p>	<p>Steps and measures are determined by the line</p>	<p>Implementation of strengthened duty shifts LIS anesthesiologists</p> <p>Increased anesthesia nurse service at night</p>	
<p>Acute PCI (Followed up by the cardiology department)</p>	<p>The aim in the future is invasive cardiology with complete 24/7 provision both electively and acutely.</p> <p>We are now actively working towards HSØ for approval for STEMI treatment 24/7.</p>		<p>Followed up by the line</p> <p>Approval HSØ</p> <p>The rest of the chain is prepared (anaesthesia, intensive care, HO; MO)</p>
<p>Structural conditions</p>	<p>Systematic and fixed BEST training in emergency departments/training on emergency incidents.</p> <p>Establish program management KSP.</p> <p>The program board is tasked with Investigating what it means to be Norway's largest emergency hospital in terms of overall dimensioning of the services at Ahus? Assess which emergency medical services are available</p> <p>Housing must have the following role in relation to trauma</p> <p>Simulation of capacity and assessment of different models for solution. Determining the necessary intensive/monitoring capacity in the medium and long term will, among other things, be addressed here</p>		

Sub-plan 2: Acutely and critically ill patients

Process drawing



Sub-plan 2: Acutely and critically ill patients

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