Quality Report 2020

SUNNAAS SYKEHUS

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Value base

Based on national values: **quality, safety and respect**, Sunnaas Rehabilitation Hospital added the following content to its own values:

Professionalism

high level of professionalism and curiosity when encountering others, safety in own role and ability to meet others with knowledge, compassion and empathy.

Commitment

show a strong interest in work tasks, tackle professional challenges and commit through active participation in the working environment.

Enjoyment

spread joy through optimism and courage, inspire and gladden the hearts of patients, colleagues and users.

Introduction

Sunnaas Rehabilitation Hospital specialises in physical medicine and rehabilitation, and is one of eleven health enterprises within the Southeastern Norway Health Authority. Most of the patients come from the southeast part of Norway. The hospital also welcomes patients from all over the country and interacts with approximately 270 municipalities each year. (218 in 2020).

Sunnaas Hospital offers multidisciplinary and highly specialised rehabilitation for patients with spinal cord injuries, brain injury, stroke, multitrauma, cognitive challenges, pain conditions, severe burns, neurological diseases and rare congenital diagnoses.

We offer clinical services organized as bed units, ambulatory and outpatient services, in-person attendance and digital consultations. Rehabilitation is provided shortly after an injury or illness has occurred, and later in the course of injury and healing, such as health checks, functional assessments and/or assessment of further rehabilitation needs, or as intensive training. The hospital has life cycle responsibility for some of the target groups.

Rehabilitation is often a protracted process for patients, which occurs primarily outside the hospital. The patient will make the most significant effort, but there is a need for practical solutions, further rehabilitation, support and follow-up by a family doctor or local clinic. A significant task for Sunnaas Hospital is therefore to provide competence-enhancing work and guidance in interaction with the entire chain of agencies that are tasked with safeguarding the health and welfare of its patients.

User Interaction

The hospital has a user committee and a youth council. The committees actively participate in reviewing goals, building plans, development work and strategic processes at the hospital. The youth council promotes views and issues that can improve patient services for younger users.

The hospital arranges general meetings for patients and dialogue meetings with user organizations representing the patient groups at the hospital. When meeting individual patients, the hospital offers dedicated training for patients and their loved ones. Our *experience consultants* play a significant role in assisting patients in the rehabilitation process. Patients and their loved ones should be involved in decisions throughout the rehabilitation process.

Regulations on management and qualified improvement and national action plan for patient safety and quality improvement are decisive for systematic quality work

Objectives in the national action plan:

Reducing the incidence of patient injuries

Priority areas:

Improve management and culture

Increase competence

Develop national initiatives

Establishing systems and structures

Systematic quality and patient safety work

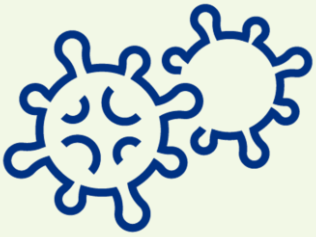
Sunnaas Rehabilitation Hospital will work to establish equal services for all, ensure quality and patient safety, and optimising the use of resources as much as possible. The hospital works systematically on continuous improvement of quality and patient safety. Quality and patient safety are introduced as fixed topics at all management meetings. The Regulations concerning Management and Quality Improvement in Health and Care Services came into force in 2017 and the National Action Plan for Patient and Quality Improvement was established in 2019.

In addition to following national laws and recommendations, the hospital has selected a quality system that is optimally suited for medical rehabilitation. Sunnaas Hospital is accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF). CARF is an international non-profit organization that accredits medical rehabilitation service providers worldwide. Sunnaas Hospital first became CARF-accredited in 2006. The hospital started work in 2020 to prepare for re-accreditation in the following specialised rehabilitation programmes:

Programme for multitrauma, burns and Guillain-Barré
Special programme for spinal cord injury
Special programme for traumatic brain injury
Special programme for strokes
Special programme for children and adolescents

Sunnaas Hospital complies with the initiative for areas of the *I Trygge Hender 24/7* patient safety programme.
Prevention of falls
Prevention of pressure sores
Medication reconciliation
Safe discharge
Undernourishment
Early detection of sepsis at bed wards
Patient safety visits

All clinical wards and units that offer patient services carry out patient safety checks twice a year. Here, representatives from senior management and healthcare professionals meet in clinical practice at dialogue meetings on patient safety. In the spring of 2020, the patient safety visit was adapted to infection control routines and implemented at all clinical departments. The focus was adherence to the new COVID-19 guidelines.
In the autumn of 2020, the hospital celebrated International Patient Safety Day on September 17th. Several events were held with a focus on patient safety in the autumn of 2020.



I was very well received, even in COVID-19 times
(Quote from User Survey)

In 2020, no patients or staff were infected with coronavirus in the hospital.

In the spring of 2020, a specialised rehabilitation programme was established for patients who had undergone COVID-19.

Antibiotic management is a regional project at the Southeastern Norway Health Authority. The goal of a 30 % reduction in broad-spectrum antibiotics by 2020 has been met. The hospital records the prevalence of healthcare-associated infections (HAI) every quarter on a fixed date. To prevent and limit infections in the health enterprise, infectious disease professionals offer continuous teaching.

Internal audits are carried out according to a fixed method and an adopted audit programme. Internal auditing is a self-check that helps ensure that the hospital follows internal and external requirements, reduces risk and identifies areas for improvement.

The hospital is represented in regional forums that ensure quality and patient safety. In addition, the hospital participates in the Professional Council for the National Spinal Cord Injury Register (NorSCIR) and in work to quality assure and further develop the register. In 2020, the Norwegian Spinal Cord Injury Register was assessed at the highest stage 4A by the expert group assessing the quality and function of all national medical registers. The website www.kvalitetsregister.no is used to publish the annual report along with significant information and performance results.

Pandemic year 2020

The year has been characterised by the COVID-19 pandemic. Naturally, this led to increased attention to infection control and preparedness. The infection control team has been preparing hospital guidelines in line with the national guidelines, and the hospital has changed work-flows and processes on an ongoing basis. Immediately after the pandemic outbreak in March 2020, work was underway to establish a specialised rehabilitation programme for patients who had undergone the COVID-19 disease. During the pandemic, employees have shown great skill and willingness to ensure good conditions for patients and colleagues. The pandemic also became an opportunity to find good solutions and implement new methods and intervene quickly. No rehabilitation patients staying at Sunnaas Hospital were infected with the novel coronavirus during their stay in 2020. The pandemic has affected many hospital conditions – including the availability of services and waiting times have increased despite increased focus on digital services for patients and relatives where the total number and share of video consultations increased significantly.

In the User Survey for 2020, 91 % of patients said they were mostly satisfied with the services they received at Sunnaas Rehabilitation Hospital in 2020. Similarly, more than 95 % said

Indicators for measurement

"A quality indicator is an indirect measure, a pointer, that says something about the quality of the area being measured."
(Definition of quality indicator, from Directorate for Health and Social Affairs)

Quality of recorded data is a prerequisite for good performance information

they felt safe during their hospital stay and they were received in a good way when they arrived at the hospital.

Patient data and quality indicators

The results in this quality report are visualised through green, yellow and red *traffic lights*. Most Key Performance Indicators are measurable and show development aimed at specific goals, enabling decision-makers to assess goal achievement within given limits. Due to COVID-19, goal achievement for some indicators was adjusted according to the Assignments and Orders for Sunnaas Rehabilitation Hospital in June 2020. The pandemic situation has affected the achievement of measurements for several indicators

Patient data per programme
Patients discharged, distribution by sex, and average age per rehabilitation programme

Availability
KPI 1.1 Average number of days waiting for admission
KPI 1.2 Discharges of inpatient and outpatient clinics
KPI 1.3 Use of interpreters
KPI 1.4 Passed scheduled time
KPI 1.5 Average assessment time for referrals
KPI 1.6 Rejected referrals

Efficiency
KPI 2.1 Average bed-unit hours per programme
KPI 2.2 Patients not coming to outpatient clinic appointment
KPI 2.3 Share of discharge summaries sent within one day

Effect
KPI 3.1 Functional Independence Measurement – FIM
KPI 3.2 Discharged to, per programme

Patient safety
KPI 4.1 Unplanned transfers per programme
KPI 4.2 Falling incidents
KPI 4.3 Antibiotic use
KPI 4.4 Prevalence of health-related infections
KPI 4.5 Risk screening

Satisfaction
KPI 5.1 Patient satisfaction response rate
KPI 5.2 All in all, how satisfied you are with your stay
KPI 5.3 Goals for your stay were prepared with your help. Did you reach these goals?
KPI 5.4 Patient complaints

Goal achievement for selected indicators

High goal achievement *Result is within acceptable level*	Moderate achievement *Result is outside acceptable level and should be reviewed*	Low goal achievement *Result is substantially outside acceptable levels and should be reviewed in detail*
KPI 1.3a Interpreter's Competence 93 % Goal: 93 %		**KPI 1.1 Waiting time**: 67 days. ****Goal:** Sunnaas<53 Southeastern Norway Health Authority:<54 days
KPI 1.3b Remote interpretation: 71 % Goal: 40 %	**KPI 3.1**Functional Independence Measurement (**FIM**) Improvement in total points per programme. Stroke programme: 15.5 pts. Traumatic brain injury:15.4 p Multitrauma, neurology and burns: 19.3 pts. Goal for all programmes: > 20 p	**KPI 1.2 Discharges** total Inpatient 2557 (79.7 %) Outpatient clinic 6940 (86.7 %) Goal: Inpatient 3200. Outpatient 8000.
KPI 1.5 Average **assessment time** for referrals throughout the enterprise: 5.1 calendar days Goal**:** Sunnaas 5 calendar days. National 10 calendar days	**KPI 4.2 Fall** per 1000 beds: 1.9 % Goals: <1.5 %	**KPI 1.4 Passed scheduled time:**11 % ** Goal: 6 %
KPI 2.2 Patients not arriving for outpatient consultation: 0.7 % Goal: 1.5 %	**KPI 5.1 Response rate** patient satisfaction 54.3 % Goal: >60 %	
KPI 2.3 Discharge summary time 1 day: 74 % Goal: 70 %		
KPI 3.1 Functional Independence Measurement (**FIM**). Improvement in points total per programme. Spinal cord injury programme: 25.4 pts. * Child/adolescent spinal cord injuries and multitrauma Children and adolescents with acquired brain injuries: 20.3 pts. Goal for all programmes: > 20 p	**KPI 5.3 Patient satisfaction**. "Goals for your stay were prepared with **your** help. Did you reach these goals?" (62 %) Metrics not set	
KPI 4.3 Antibiotic (consumption) reduced by: more than 30 % Goal: > 30 %		
KPI 4.4 Prevalence measurement of hospital infections: 1.8 % Goal: <3 %		
KPI 5.2. Patient satisfaction. All in all, how satisfied you are with your stay? 91 % Goal: >90 %		

Table I *Overview shows improvement areas the hospital has selected as key figures. To assess the degree of goal achievement, it is essential to define metrics and limit values for each quality indicator. The overview only shows the areas for which the clinic management has decided to set limits. *The number for children with spinal cord injury is less than 5 and is therefore not presented. **Additional OBD 2020 corona adjusted June: Goal for 2020 that the average waiting time in 2020 should be reduced compared to 2019 and the 2020 goal to comply with a greater share of patient agreements compared to 2019 (passed scheduled time) lapses. KPI=Key Performance Indicator*

Patient data per rehabilitation programme

The hospital uses the term *primary rehabilitation* for the rehabilitation carried out immediately after acute injury or illness. Primary rehabilitation stays have a longer duration than programmes such as health checks, assessments and other types of follow-up stays. In the tables (page 9) we have prepared the various diagnosis-specific rehabilitation programmes that patients have been admitted to, such as stroke, traumatic brain injuries or pain rehabilitation. The tables are divided into services for adults, children and adolescents 0-18 years). It states how many times the rehabilitation programme has been completed and the number of unique patients who have been offered a place. The programme can be implemented several times for the same patient.

When it comes to gender distribution, the tendency is still that there are more men admitted to rehabilitation than women, with the exception of some specific programmes and pain rehabilitation programmes, where the majority of patients are women.

The median age ranges from 38 to 54 for primary rehabilitation programmes, while in follow-up stays there is less variation in the median age (49 – 57).

Adults: primary rehabilitation and pain rehabilitation

Programme specific	Completed.	Unique patients	Proportion of women	Avg. age	Max. age	Min. age	Median age
Stroke	145	145	32 %	52,9	78	20	54
Mild to moderate cognitive sequela	144	143	38 %	46,5	74	19	48
Multitrauma, burns and G-B syndrome	67	67	46 %	48,3	82	19	51
Spinal cord injury	84	84	31 %	55,1	80	19	59
Pain rehabilitation programme	40	36	58 %	44,5	65	19	46
Pain rehabilitation programme – Hypermobility	52	50	94 %	38,0	65	19	38
Traumatic brain injury	72	71	28 %	49,3	81	19	50

Adults: control – assessment – follow-up – group

Programme specific	Completed.	Unique patients.	Proportion of women	Avg. age	Max. age	Min. age	Median age
Stroke	203	167	35 %	55,3	81	19	57
Mild to moderate cognitive sequela	132	127	44 %	47,9	75	20	49
Multitrauma, burns and G-B syndrome	76	72	47 %	48,6	82	20	51
Spinal cord injury	449	384	32 %	51,8	88	19	53
Traumatic brain injury	82	69	32 %	50,9	81	19	51

Adults: specific rehabilitation programme

Programme specific	Completed.	Unique patients.	Proportion of women	Avg. age	Max. age	Min. age	Median age
Ability to work	109	109	53 %	43,1	65	19	45
Cerebral palsy	67	57	51 %	40,8	74	19	36
Poliomyelitis	47	45	62 %	62,8	85	32	70
Rehabilitation potential	229	224	48 %	45,7	80	19	45
Spasticity	35	29	40 %	51,1	75	25	52
Eating and swallowing	83	83	47 %	59,3	89	19	63
Transportation assessment	132	128	28 %	49,5	81	19	52

Children 0-18

Programme specific	Completed.	Unique patients	Proportion of women	Avg. age	Max. age	Min. age	Median age
Acquired brain injury – Control – Assessment – Followup – Grp	29	26	48 %	13,4	18	7	14
Acquired brain injury – Primary rehabilitation	18	18	22 %	12,6	18	3	14
Spinal cord injury and multitrauma – Contr – Assessment – Follow-up – Grp	26	22	50 %	15,0	18	1	16,5
Spinal cord injury and multitrauma – Primary rehabilitation	8	8	25 %	14,9	18	3	17
Eating and swallowing – Specific rehabilitation programme	16	16	56 %	7,1	15	1	5,5
Transportation assessment – Specific rehabilitation programme	33	32	45 %	17,2	18	16	17
Other – Specific rehabilitation programme*			75 %	18,0	18	18	18

Table II *describes completed programme, unique patients per programme and demographic patient data. "Completed programme" mean how many times the programme has been completed during 2020. *Number of patients in "Other – Specific rehabilitation programme" is less than 5.*

1.0 Availability

Goal achievement in 2020 was lower for some availability indicators. The year has been marked by the fact that the hospital has had to quickly restructure due to COVID-19 by e.g. temporary closure of wards, restructuring outpatient services for digital consultations and establishing services for patients with rehabilitation needs after undergoing the COVID-19 disease.

1.1 Average number of days waiting for admission

The average waiting time in 2020 was 67.1 days for discontinued patients at Sunnaas Rehabilitation Hospital. That is 15 days more than in 2019. The high waiting time is due to some treatment services being shut down for a period in 2020 due to COVID-19. This led to postponing patient appointments. In December 2020, the wait was 48 days. Continuous intake of deferred patient stays at spare capacity and weekly control checks of waiting lists were measures taken to reduce waiting times.
Waiting time figures are counted once a month. Where errors are recorded in the assessment of referrals, this will affect waiting days. In 2020, registration errors were detected that resulted in a significant number of waiting days at the Spinal Cord Injury Department (RMS). Good registration practices and secondary control checks are constantly being worked on.

67 days average waiting time for patients except primary rehabilitation

11 % of patient appointments have passed the scheduled time and are waiting for a date for the appointment

The increase in waiting times can be explained by the closure of some treatment possibilities for a period due to COVID-19. In addition, a registration error has resulted in a significant number of waiting days at the Spinal Cord Injury Department (RMS).

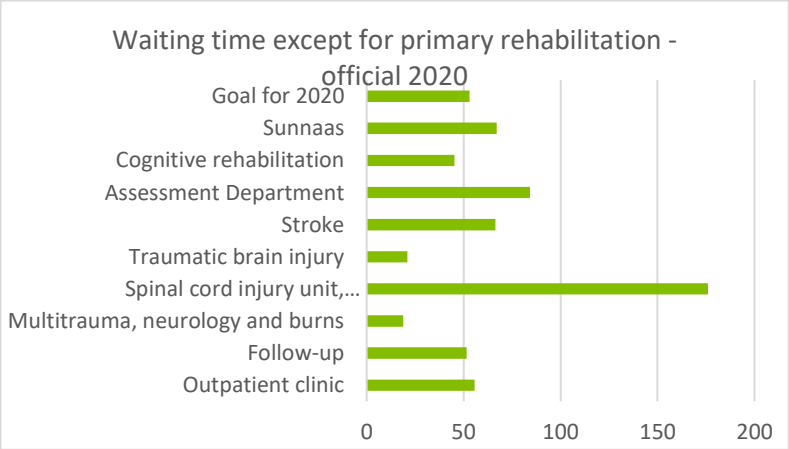


Figure I: *Waiting times – excluding primary rehabilitation* – Sunnaas Hospital. KRE= Cognitive rehabilitation, VRD= Assessment Department, SLA= Stroke Department, TBI= Traumatic Brain Injury Department, RMS= Spinal Cord Injuries Department for Children and Adolescents, MNB= Multiple Trauma, Neurology and Burns Department, OPF = Follow-Up Department, PIA = Outpatient Clinic Department, Ambulatory Services.

Patients referred for primary rehabilitation after a new injury or acute illness are already in treatment and are not included in the official waiting time statistics. Primary rehabilitation is the core

Availability

activity at Sunnaas Hospital, and there is therefore a need for an overview of waiting times. That is why monthly point measurements are done on the number of patients who are ready for transfer to Sunnaas Hospital, and on how long they must wait before being offered a spot at the hospital.

Some departments face capacity challenges in some programmes. Others deal with the pressure from new referrals and few discharges, including patients with complex injuries.
The hospital is investing further in outpatient activity and outpatient activities to remedy capacity challenges for bed-based activities. It is expected that this can also improve capacity utilisation.

1.2 Inpatient and Outpatient discharges

The hospital has a bed capacity of 159 beds. This is unchanged from previous years.

In 2020, the hospital had 2557 inpatient discharges. This is a decrease from 3219 in 2019. The goal for 2020 was 3200 inpatient discharges.

Number of inpatient discharges 2557

Number of outpatient consultations 5982

Number of health and work consultations 958

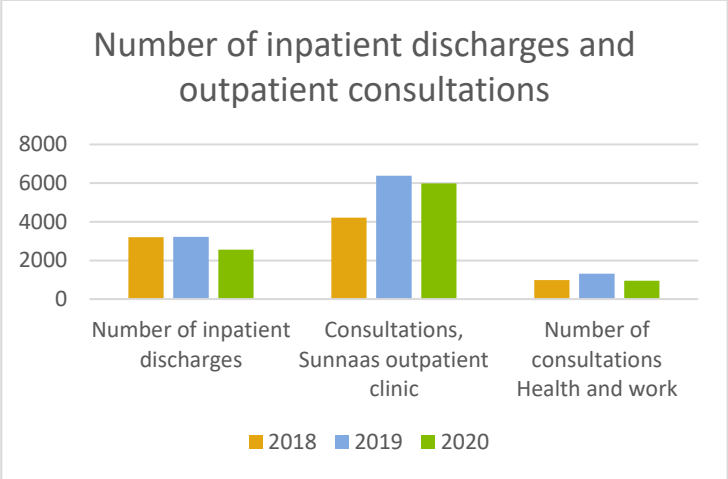


Figure II *Number of discharges*

The lack of goal achievement in the number of discharges and outpatient consultations can be explained by the fact that some treatment services were shut down for a time, due to COVID-19

In 2020, the hospital conducted 6940 outpatient consultations. The goal for 2020 was 8000 consultations. This is a reduction of 739 consultations from 2020 compared to 2019. The number of consultations for Health and Work (a multidisciplinary programme) decreased from 1306 to 958 consultations. Other outpatient consultations decreased by 391.

Outpatient activity was reduced due to failed attendance for one period during the pandemic. Digital solutions were adopted to

Availability

maintain this service offer. A large proportion of the outpatient activity is exercise therapy in Studio 99. As of March 2020, this activity was reduced and adjusted throughout the year according to current guidelines.

1.3 Use of interpreters

At Sunnaas Rehabilitation Hospital, the number of interpreting assignments is recorded by what languages have been needed, the interpreter's qualifications and the type of interpreter used. Of a total of 645 interpreting assignments at Sunnaas Hospital in 2020, 93 % of the assignments were carried out by state authorised interpreters or those with an interpreter education. Interpreters in 30 different languages were used in 2020 (32 in 2019). The largest language group is Polish, 33 %, while Arabic (13 %), Southern Kurdish (13 %) and Lithuanian (12 %) are the next largest language groups.

The number of interpreter assignments decreased slightly from 665 (2019) to 645 (2020). There may be several reasons for this decline, such as restrictions on visits to the hospital and the closure of wards for periods due to COVID 19.

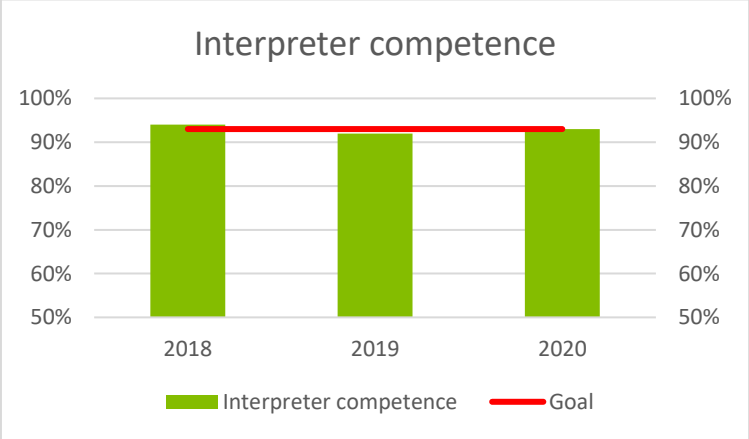


***Figure III**. Interpreter competence*

Sunnaas Hospital aims at 40 % of all interpreting assignments to be delivered as remote interpretation. In 2020, 71 % were delivered as remote interpretation (26 % in 2019) via video consultation or telephone. This increase is likely to be related to infection control measures and visitor restrictions at the hospital. Several different video solutions were used with varying success and largely influenced by unstable networks, as well as different technology maturity on the interpreter side. There is reason to assume that some interpreting assignments have not been held as a result.

Interpretation in person 29 %

Interpretation via video 44 %

Interpretation via phone 27 %

The increase in the proportion of interpreter assignments carried out via video can be explained by the fact that the hospitals and interpreter services have made these changes due to COVID-19

The graph below shows an overview of the different interpreting methods. Both in-person and video interpreters maintained the quality of interpreter conversations and are described as preferred interpreters to ensure patient safety (NOU 2014, Interpreting in the Public Sector). It is therefore unfortunate that the use of phone interpreters increases.

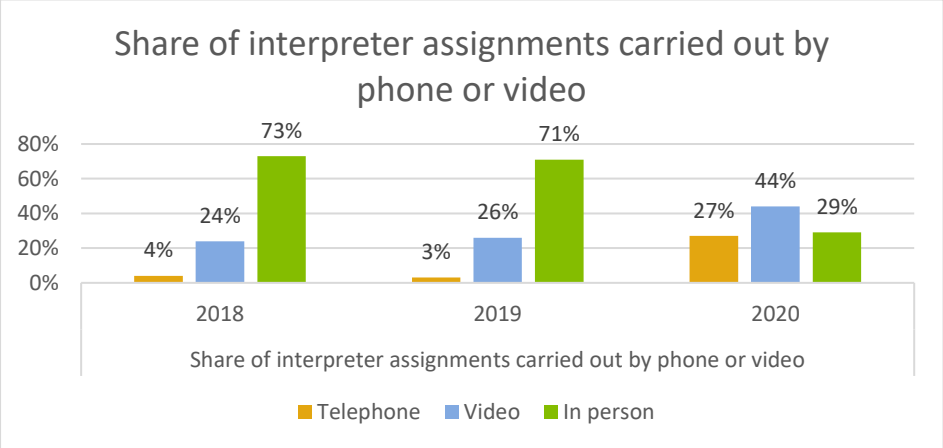


Figure IV *Interpreting assignment scheduled hours*

1.4 Passed scheduled hours for patient appointments

Sunnaas Rehabilitation Hospital shall maintain an overview of all waiting patients at all times in the course of treatment and report monthly on scheduled hours/time to the Southeastern Norway Health Authority. The hospital should be able to plan activity in the future, based on the proportion of planned contacts. The health enterprise must comply with at least 94 % of the agreements by the end of 2020. Sunnaas Hospital complied with 89 % of patient agreements in 2020.

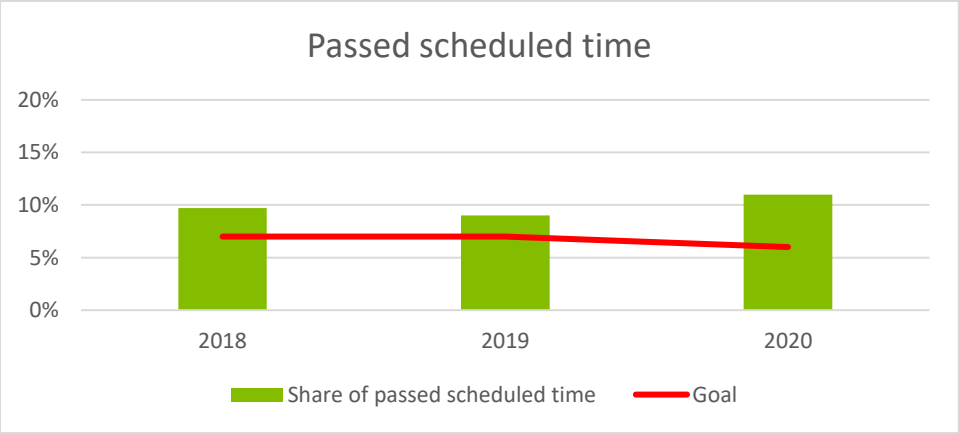


Figure V *Passed scheduled time.* The goal line has been adjusted for COVID-19 in 2020.

The proportion of patients passing the scheduled time at the health enterprise increased from December 2019 (399) to December 2020 (461). In 2019, and until COVID-19 broke out in 2020, this indicator showed good development. The proportion and number of people with a scheduled time rose sharply as the hospital closed down assessment and follow-up services, as well as no-shows for the outpatient clinic. In order to bring down scheduled time, measures have been put in place to use video and telephone consultations in follow-up programmes for the Spinal Cord Injury Department and the Traumatic Brain Injury Department.

1.5 Average assessment time for referrals

Sunnaas Rehabilitation Hospital has set a goal of 5 working days and only measures doctor assessment time (starting when the referral has been received until the doctor has assessed whether the patient is entitled to necessary health care). The average assessment time was 5.1 working days in 2020. This has decreased slightly compared to 5.7 working days in 2019. This is closely monitored, and good routines are maintained to achieve the goal for 2021. All referrals have an assessment time below 10 working days. The national goal defines the assessment time as the number of working days from when a referral is received by the specialist health service until the patient has been given information about the right to necessary health care pursuant to Section 2-2 of the Patient and User Rights Act.

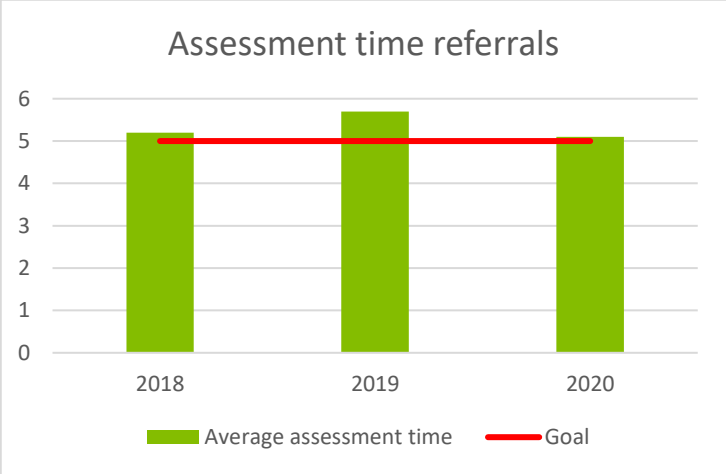


Figure VI: Average assessment time on referrals at Sunnaas Rehabilitation Hospital

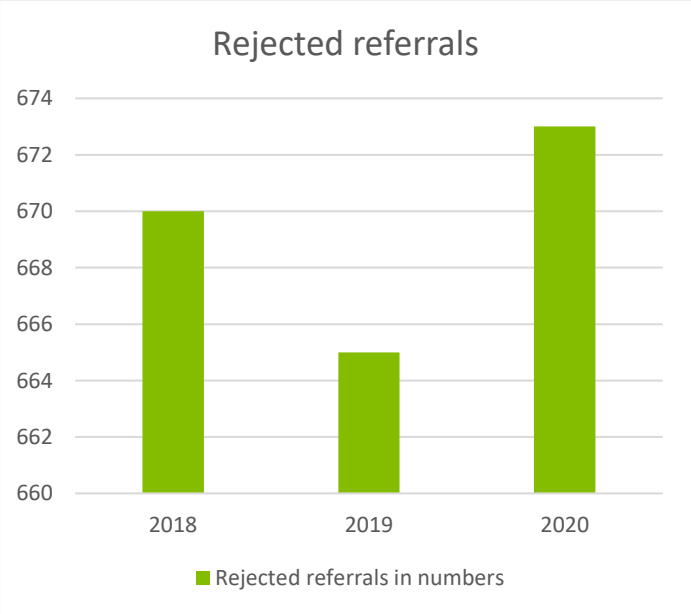


Figure VII: *Rejected referral at Sunnaas Rehabilitation Hospital*

1.6 Rejected referrals

Rejected referrals means cases where the patient is not entitled to necessary health care in the specialist health services or that Sunnaas Rehabilitation Hospital does not have an offer for the relevant target group. We are constantly working to guide and inform the referrers as to who is included in a target group for the hospital's rehabilitation services. In 2020, 673 (19.2 %) of 3510 referrals to Sunnaas Hospital were rejected. This is a slight increase in the number of referrals rejected compared to 2019 (665), but a slight percentage decrease compared to 2019 (20.8 %). This is due to an increase in the number of referrals to the hospital in 2020 compared to 2019 (3193 referrals in total).

2.0 Efficiency

2.1 Average length of stay per programme

There is some variation in length of stay between the different rehabilitation programmes at the hospital. Patients admitted to primary rehabilitation after injury or illness have longer stays than patients admitted to assessment and follow-up stays. Patients who are hospitalised for highly specialised rehabilitation often have complex and difficult challenges, and there may be a wide variation in the extent of injury and the patient's condition. This also applies to snuff, e-cigarettes and the like. To meet the needs of patients and to ensure a good transfer from hospital to home, many patients are discharged for shorter periods of time in an attempt to remain at home after an illness or injury.

Very positive with regular team and staff who follow patients throughout the stay.
(Quote from User Survey)

Length of stay for some programmes is predetermined and varies little over time:

- Work capability assessment: 2 weeks
- Cerebral palsy group stay: 5 days
- Poliomyelitis – assessment stay: 5-10 days
- Rehabilitation potential assessment stay: 2 weeks
- Spasticity assessment stay: 3-5 days
- Eating and swallowing: 2-3 days
- Functional assessment/assessment of transport needs: 5 days
- Control check stays vary in time, from 1 to 10 days

Need a little more time to delve into problems, went a little fast.
(Quote from User Survey)

Average length of stay for 2020 in primary rehabilitation programmes:

- Children and adolescents 0-18 years for Spinal cord injury and multitrauma: 119 days
- Spinal cord injury: 62 days
- Multitrauma, neurology and burns: 62 days
- Traumatic brain injury: 58 days
- Children and adolescents 0-18 Acquired brain injury: 58 days
- Cognitive rehabilitation: 31 days
- Stroke: 38 days
- Pain rehabilitation programme: 6 days

See the table on page 16 for comparing length of stay for primary rehabilitation programmes in 2018, 2019 and 2020.

Average length of stay per programme, primary stay

Adults: primary rehabilitation and pain rehabilitation			
	Average length of stay		
Programme specific	**2018**	**2019**	**2020**
Stroke	41	41	38
Mild to moderate cognitive sequela	31	31	31
Multitrauma, burns and G-B syndrome	65	67	62
Spinal cord injury	64	72	62
Pain rehabilitation programme	6	7	6
Pain rehabilitation programme – Hypermobility	8	9	8
Traumatic brain injury	60	57	58
Children 0-18			
	Average length of stay		
Programme specific	**2018**	**2019**	**2020**
Acquired brain injury – Primary rehabilitation	52	63	58
Spinal cord injury and multitrauma – Primary rehabilitation	62	77	119

Table III: *Average length of stay per rehabilitation programme.*

2.2 Patient no-show rates at outpatient clinic

The proportion of patient *no-shows* for consultations at Sunnaas Hospital for 2020 is 0.7 %. This is a positive decrease from 1.2 % in 2019. Exercise outpatient clinic Studio 99 is not included in the statistics. In the autumn of 2020, the hospital implemented a serial ordering scheme. This makes it possible to register no-shows, also at Studio 99. Health and Work saw a reduction from 0.8 % in 2019 to 0.4 % in 2020 for patients who have not arrived at the scheduled time.

The graphs for *no-show rate* for outpatient consultations are divided into locations. The Health and Work Programme has a separate graph.

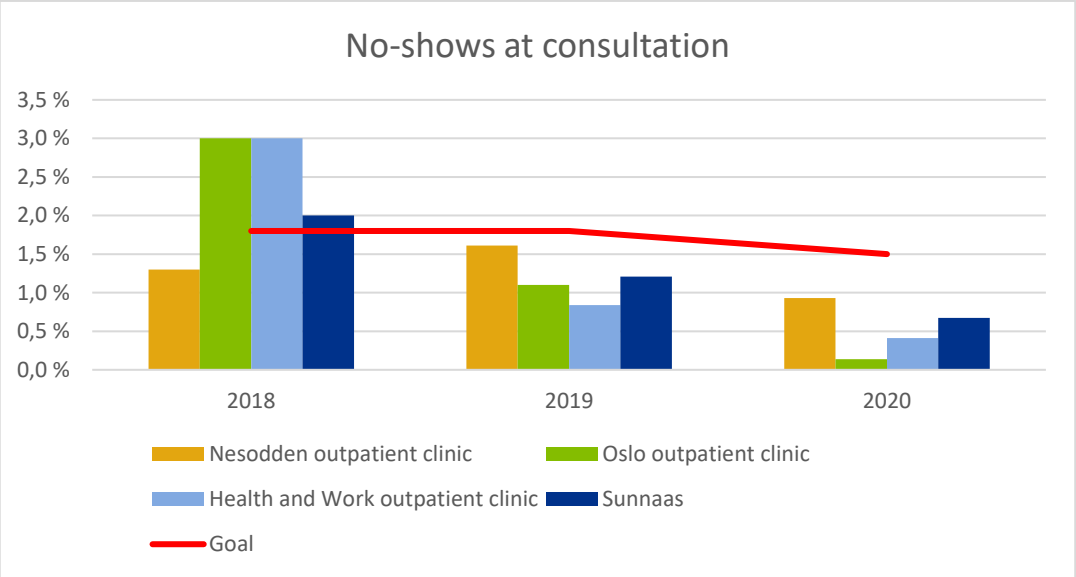


Figure VIII: *No-shows at outpatient clinic*

In 2020, patients had several contact points with the outpatient clinic before a scheduled consultation. We see three explanations for this. As a contagion measure during the pandemic, the outpatient clinic called all patients who had an in-person appointment no later than the day before the scheduled consultation. In addition, all patients receive a reminder by SMS, 24 hours before the scheduled consultation. In 2020, 22 % of all consultations were conducted by video consultation. In connection with scheduled digital outpatient consultations, patients were contacted by the hospital ahead of the consultation to assist in connecting to the digital platform.

One area for improvement for 2020 was to continue to work on complying with registration procedures for both locations, so correct registration of *no-show* quality is ensured to an even greater extent. Measures have been implemented and followed up further. In 2020, coding practices have improved. The outpatient clinic has acquired expertise in code quality, proper registration and use of reports in DIPS. We expect this knowledge will also increase at the hospital as a whole for 2021.

2.3 Discharge summaries sent within one day

Sunnaas Rehabilitation Hospital sent a total of 74 % of discharge summaries within one day in 2020. Figures for December 2020 show that 80 % of discharge summaries were sent within one day. This is an increase of 20 percentage points since January of 2020.

In 2019, a new national goal was introduced, that 70 % of discharge summaries should be sent within one day of discharge. Routines and work processes have been corrected to reach this goal. At Sunnaas Hospital, case summaries are written after the completion of the multidisciplinary report. This means at least six occupational groups should document their assessment before the doctor can complete the case summary. This led to a restructuring of working methods for both doctors and other multidisciplinary teams. By 2020, the change has been implemented at all clinical bed wards. The project has gone into operation and the doctors' supervisors are responsible for follow-up. Monthly overviews are sent out to the doctors and department/ward managers. In addition, individual statistics are prepared that are reviewed during employee interviews, or more often if necessary. In total, Sunnaas Hospital increased from 16 % in 2018 to 74 % in 2020.

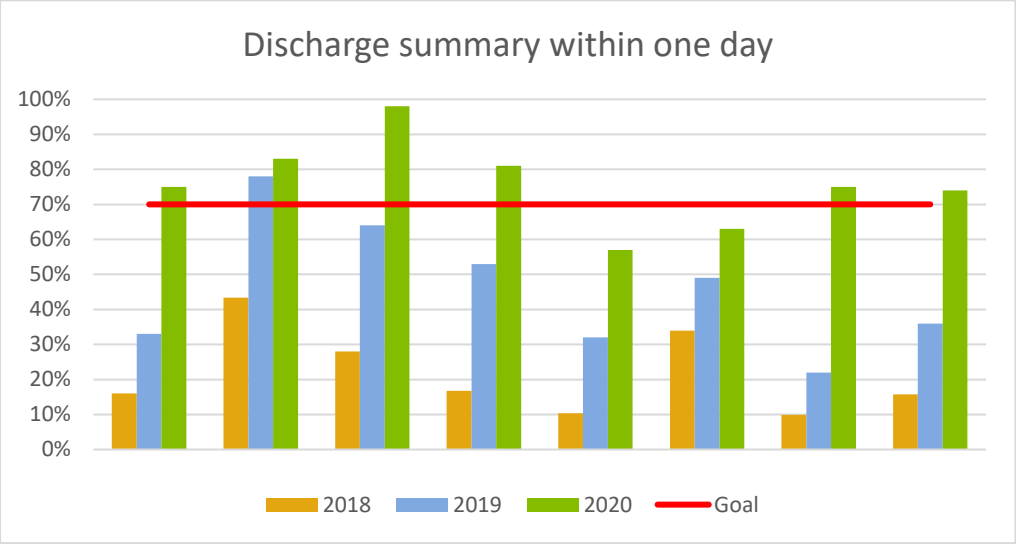


Figure IX: *Show discharge summary within one day. N = number of discharge summaries issued at each department and percent increase per department. KRE= Cognitive rehabilitation, VRD= Assessment Department, SLA= Stroke Department, TBI= Traumatic Brain Injury Department, RMS= Spinal Cord Injuries Department for Children and Adolescents, MNB= Multiple Trauma, Neurology and Burns Department, OPF = Follow-Up Department,*

3.0 Effect

3.1 Functional Independence Measurement – FIM

Functional Independence Measure (FIM) is a measurement that illustrates the ability to perform daily tasks. The FIM tool is easy to manage and is used to collect data individually and to present data for large groups. The degree of activity restriction changes during the rehabilitation period. The changes that appear in the FIM results can be used to capture improvements in the ability to do daily tasks and to analyse the results of rehabilitation.

The nurse, in collaboration with the multidisciplinary team, scores patients who are admitted to primary rehabilitation*.

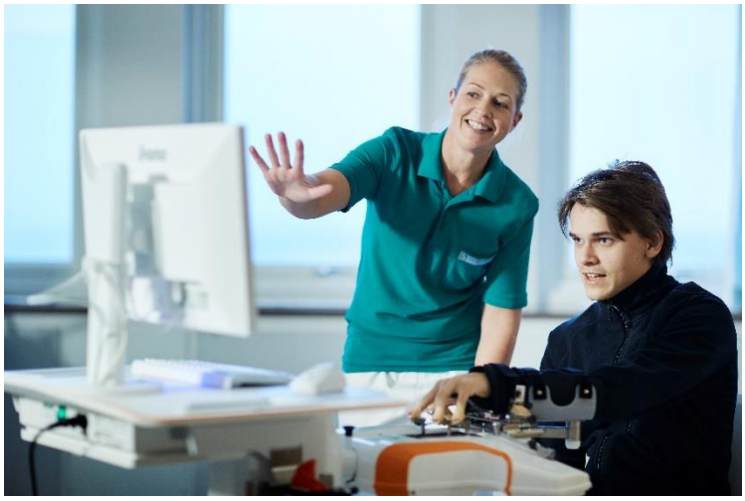
A change in points shows how great an improvement in independence the patient has achieved from admission to discharge. Sunnaas Hospital does not consider FIM a good enough nuanced tool to reflect changes in cognitive function for patient groups with cognitive difficulties. For 2020, the results show an average change in functional improvement and cognitive improvement for all primary rehabilitation programmes, totalling 18.8 points.
The hospital has a goal of average improvement of over 20 points.

Results for improvement.
Change in average points from admission to discharge:

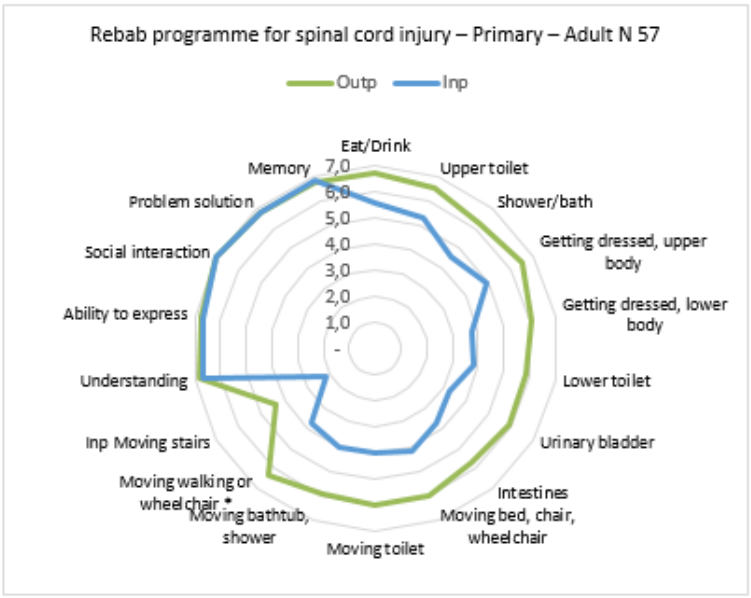
- Spinal cord injury adults *25.4 pts.* N=57
- Multitrauma, burns and Guillain-Barré syndrome *19.3 pts*. N=48
- Traumatic brain injury *15.4 pts.* N=46
- Stroke *15.5 pts.* N=91
- Acquired brain injury, children and adolescents *20.3 pts.* N=12
- The numbers for children with spinal cord injuries and multitrauma is under 5 and is therefore not presented.

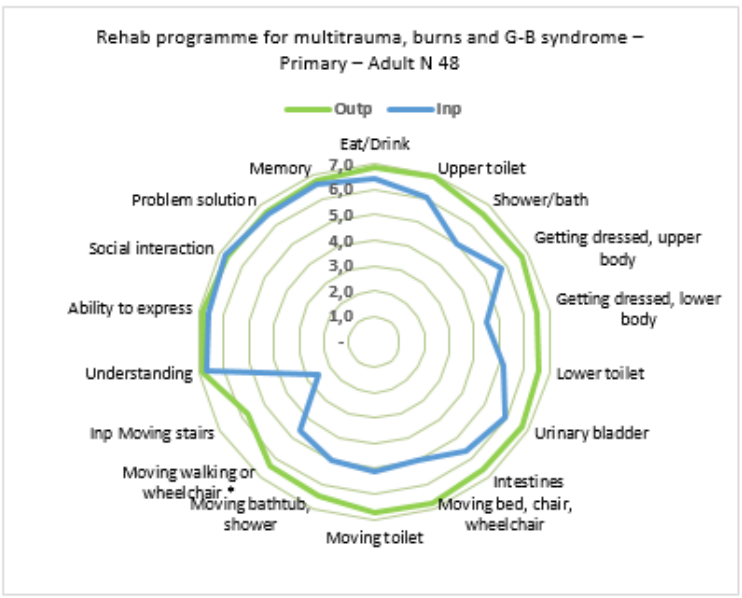
**Primary rehabilitation is defined as rehabilitation carried out immediately after an acute injury or illness.*

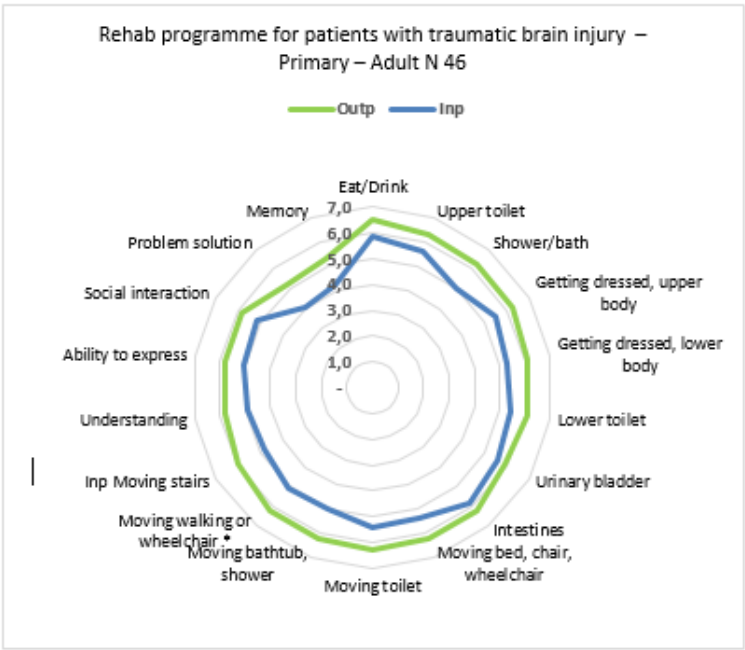
I experienced more control and understanding of my challenges
(Quote from User Survey)

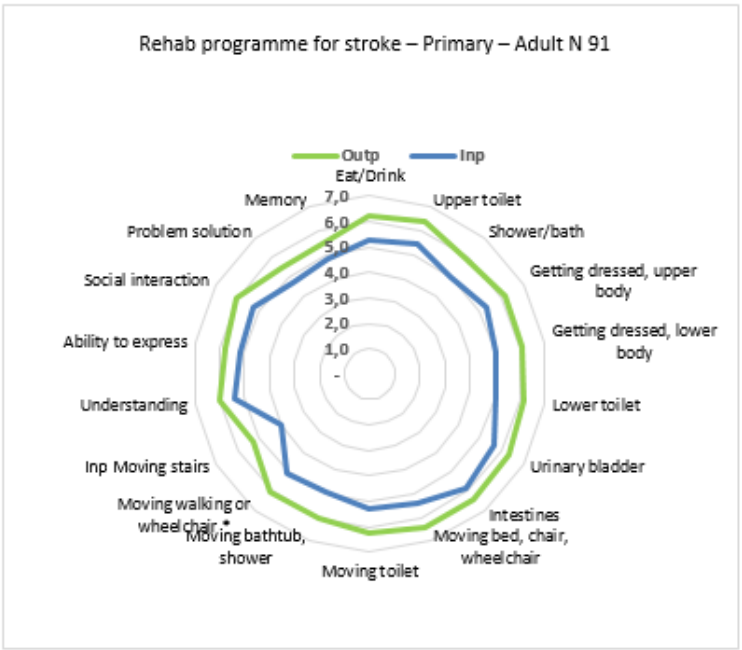


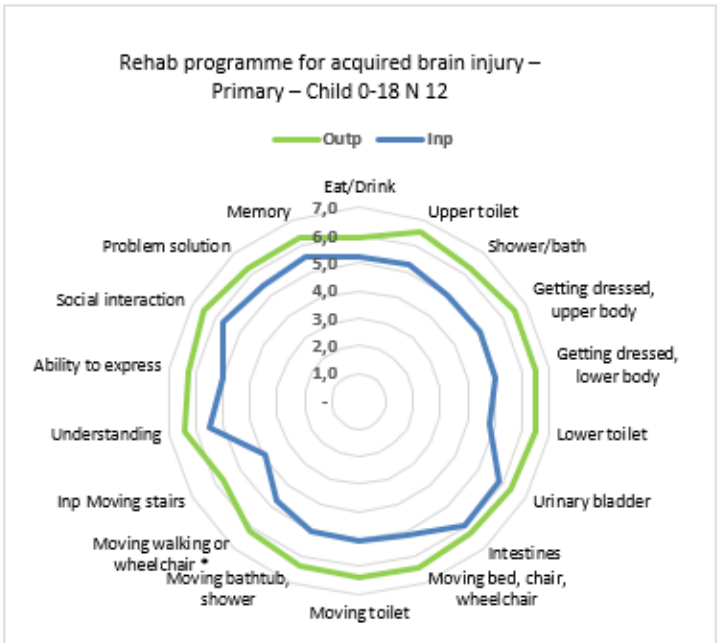
Functional Independence Measurements – FIM











Figures X-XIV: *Functional Independence Measurements – FIM change in functional ability, admission and*

3.2 Discharges per programme

Data is taken from the electronic patient records system (DIPS) and divided into five main categories; home, nursing home, other rehabilitation institution, hospital, other.

The goal for many patients admitted to rehabilitation is to move back home when discharged from the hospital. After a disability, there is often a need for extensive adaptation at home, so not all patients can be sent home right after rehabilitation. Patients may need follow-up at other rehabilitation institutions or at rehabilitation wards in nursing homes or health clinics before they can return home. Several rehabilitation programmes offer a week's stay for follow-up of specific goals set during the rehabilitation stay.

Home: Patients currently staying at *assessment and follow-up departments* mainly live at home and are naturally discharged to home. That is why these programmes are not included in the table below. Patients who have been admitted to *primary rehabilitation* are also discharged mainly to their homes.

Other institution: Patients may need to continue rehabilitation elsewhere after their stay at Sunnaas Hospital. Patients are then discharged to other rehabilitation centers that Sunnaas Hospital interacts with for a time-limited stay, with the goal of improving strength, training balance and completion of rehabilitation.

Nursing home: Patients are discharged to nursing homes or health clinics. This can be a temporary stay and not necessarily permanent. Patients with stroke may need to stay at rehabilitation wards at nursing homes/health clinics before being discharged to home

Hospital: includes all hospital specialisations for examination, follow-up and treatment of existing or newly-arising health conditions.

Type of programme	Age	Programme specific	Unique patients.	Home	Other	Nursing home	Other rehab inst.	Hospital
Primary rehabilitation	0 - 18	Acquired brain injury	18	83 %	0 %	0 %	0 %	17 %
Primary rehabilitation	0 - 18	Spinal cord injury and multitrauma	8	88 %	0 %	0 %	13 %	0 %
Primary rehabilitation	Adult	Stroke	145	65 %	2 %	8 %	19 %	6 %
Primary rehabilitation	Adult	Mild to moderate cognitive sequela	143	99 %	1 %	0 %	0 %	1 %
Primary rehabilitation	Adult	Multitrauma, burns and G-B syndrome	67	81 %	0 %	4 %	4 %	10 %
Primary rehabilitation	Adult	Spinal cord injury	84	82 %	1 %	10 %	5 %	2 %
Primary rehabilitation	Adult	Traumatic brain injury	71	67 %	1 %	13 %	8 %	11 %
Pain rehabilitation programme	Adult	Pain rehabilitation programme	36	100 %	0 %	0 %	0 %	0 %
Pain rehabilitation programme – Hypermobility	Adult	Pain rehabilitation programme	50	100 %	0 %	0 %	0 %	0 %

Table IV: *Discharge to home, other, nursing home, other rehab institution and hospital.*

Effect

Annual analysis of unplanned transfers is done for CARF accredited programmes.

Improvement work focuses on good routines to capture deteriorating conditions in patients early in the treatment.

Could have been desirable with closer communication between the treatment hospital and Sunnaas Hospital
(Quote from User Survey)

NEWS2
(Early Warning Score II) is introduced as a clinical tool.

4.0 Patient safety

4.1 Unplanned transfers per programme

At Sunnaas Rehabilitation Hospital, we identify which hospitalisations are not planned transfers to acute hospitals and the reason for this. Results from analyses are used for improvement work aimed at rehabilitation programmes/offers and teaching of patients, relatives and employees.

An unplanned transfer may occur in unexpected conditions such as infections, falls, worsening of condition or other acute situations. Patients who have experienced severe traumas or severe illness can quickly develop a worsening condition. A patient may also have multiple unplanned transfers during the rehabilitation process due to a condition's complexity and/or a recurrence of the same problem. A total of 122 unplanned transfers, of which 90 were unique patients, were transferred to other hospitals in 2020. Compared to 2019, there was an increase of 20 unplanned transfers in 2020.

Patients are transferred to acute hospitals for further observation and treatment before returning to Sunnaas Hospital to continue rehabilitation.

Keeping track of and evaluating unplanned transfers provides useful information about treatment pathways, unforeseen events and the health enterprise's handling of these (knowledge, routines and efficiency), as well as information on cooperation and flow between health enterprises and urban areas/municipalities.

Table Unplanned transfers per programme

Type of programme	Age	Programme specific	Completed.	Unique patients.	Not planned
Contr – Assessment – Followup – Grp	Adult	Rehabilitation programme for stroke – Contr	203	167	3
Contr – Assessment – Followup – Grp	Adult	Rehabilitation programme for multitrauma, burns and G-B syndrome	76	72	2
Contr – Assessment – Followup – Grp	Adult	Spinal cord injury rehabilitation program – Contr	449	384	22
Contr – Assessment – Followup – Grp	Adult	Rehabilitation programme traumatic brain injury – Contr	82	69	2
Primary rehabilitation	0-18	Acquired brain injury	18	18	13
Primary rehabilitation	0-18	Spinal cord injury and multitrauma	8	8	3
Primary rehabilitation	Adult	Stroke	145	145	21
Primary rehabilitation	Adult	Mild to moderate cognitive sequela	144	143	1
Primary rehabilitation	Adult	Multitrauma, burns and G-B syndrome	67	67	18
Primary rehabilitation	Adult	Spinal cord injury	84	84	21
Primary rehabilitation	Adult	Traumatic brain injury	72	71	15
Specific rehabilitation programme.	Adult	Rehabilitation potential	229	224	1

Table V: *Unplanned discharges per programme. Completed programme means the number of times the programme has been completed during 2020. Some patients may have been admitted to various rehabilitation programmes in 2020, either at the same department or at other department*

Effect

Screening of fall risk

Measures should be taken at a risk above 2 points

Yes to good reporting, openness, learning

4.2 Fall incidents

Patients admitted to rehabilitation are often at increased risk of falls. The target number for fall incidents is set at fewer than 1.5 falls per 1000 bed days. In 2020, there was a slight increase from 2019 with 1.7 to 1.9 falls per 1000 bed days. Goal achievement must also be seen in connection with the fewer bed days in 2020 compared to 2019.
The hospital has worked systematically to prevent falls and follows the *I Trygge Hender 24/7* recommendations (In Safe Hands).

All new patients are screened for fall risk upon admission, and patients at risk of falling are monitored using a multidisciplinary approach. Patients are informed that they are at risk of falling, so individual and group-based training are provided.
The number of fall incidents (69) is virtually unchanged from 2019 (70). Most fall incidents occur during the day in the patients' rooms and/or bathrooms.

The Stroke and Spinal Cord Injury Department had the most reported falls per 1000 bed days during the period. The Patient Safety Committee reviews all serious fall incidents as part of the systematic efforts to prevent falls. In 2020, one fall incident resulted in injury to a patient (fracture, rupture, wound or similar). Fall incidents that have learning value for others are anonymised and published on the hospital's website.

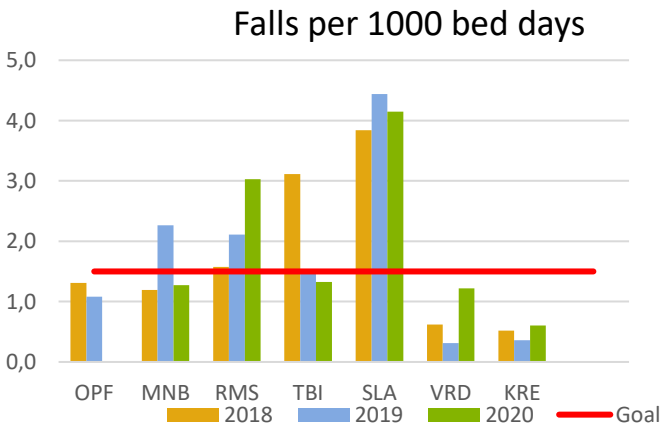


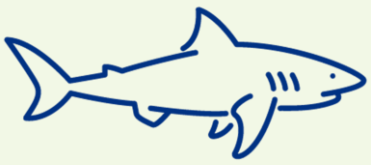
Figure XV *Fall incidents reported in TQM Health Improvement System. KRE= Cognitive rehabilitation, VRD= Assessment Department, SLA= Stroke Department, TBI= Traumatic Brain Injury Department, RMS= Spinal Cord Injuries Department for Children and Adolescents, MNB= Multiple Trauma, Neurology and Burns Department, OPF = Follow-Up Department, PIA = Outpatient Clinic Department, Ambulatory Services.*

Effect

The goal of a 30 percent reduction in overall consumption of broad-spectrum antibiotics has been reached

In 2020, the prevalence of health service-related infections was 1.9 %

E.coli bacteria. Photo: iStockphoto.com



HAI. Health-care-related infections

4.3 Antibiotic use

Sunnaas Rehabilitation Hospital has reached its goal of a 30 % reduction in the consumption of broad-spectrum antibiotics since 2012, but the reduction is lower in 2020 than in the previous three years (statistics from the National Competence Service for Antibiotic Use in the Specialist Health Service). In 2020, Sunnaas Hospital had a 46 % reduction in the consumption of broad-spectrum antibiotics compared to 2012. There is variation in reduction between different broad-spectrum antibiotics.

In the event of appropriate antibiotic use, the development of antibiotic-resistant bacteria is reduced, which is a primary goal for Norwegian health institutions. Sunnaas Hospital established its antibiotic management programme in 2016, and systematic work on such things as wise antibiotic use continues. Doctors and nurses are encouraged to complete e-learning courses in the use of antibiotics, and in teaching about infection control for staff at the hospital, antibiotic use and antibiotic resistance are one of several fixed topics.

4.4 Prevalence of hospital infections

Overall results from prevalence surveys show a stable incidence of infections occurring at the hospital. Prevalence surveys are conducted four times a year, providing a snapshot of the relevant registration days. When the numbers are divided up at a department level, some departments still have a high incidence of occurring infections and especially urinary tract infections.

We record data for the purpose of quality improvement. We aim for zero-tolerance of preventable infections. To raise patient safety, all preventive measures and adherence to these must be reviewed for each infection that occurs at the hospital.

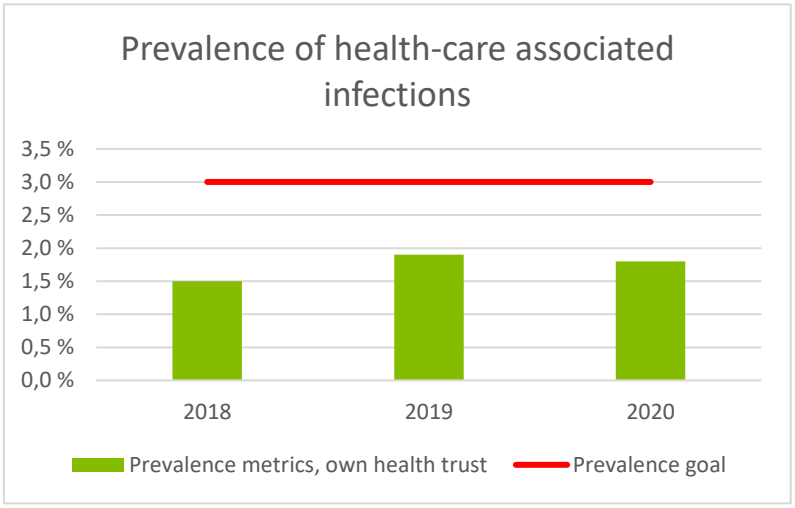


***Figure XVI**: Prevalence of health service-related infections at Sunnaas*

4.5 Risk screening

The hospital follows *I Trygge Hender 24/7* recommendations, and screens all patients for the following risk areas upon hospitalisation:

- Falls
- Pressure sores
- Infection
- Undernourishment
- Alcohol use

The purpose of the screening is to identify risks and then follow up patients who are at risk, using a multidisciplinary approach and patient training. Undernourishment is mapped using the electronic curve system, MetaVision. If a risk is discovered, measures are implemented as a treatment plan and nutritional forms are created. Children have their own nutrition form. In 2020, 70 % of all generated forms for all 4 areas were fully completed.

Percentage of risk assessment forms that have been fully completed				
Department	**Falls**	**Pressure sores**	**Infection**	**Alcohol**
Cognitive rehabilitation	93 %	37 %	98 %	83 %
Multitrauma, burns and G-B syndrome.	92 %	98 %	94 %	92 %
Follow-up	97 %	99 %	96 %	86 %
Spinal cord injury and children/adolescents	95 %	100 %	95 %	85 %
Stroke	100 %	98 %	98 %	85 %
Traumatic brain injury	92 %	100 %	100 %	87 %
Assessment	90 %	97 %	97 %	78 %
Total	**93 %**	**92 %**	**97 %**	**82 %**

Table VI: *Percentage of forms fully scored per risk area per*

The number of patients at risk of one or more of the areas depends on several conditions. Overall, 22 % of patients had a risk of a fall. For 35 %, high alcohol consumption and the risk of alcohol-related problems were revealed.

Percentage of patients at risk of				
Department	**Falls**	**Pressure sores**	**Infection**	**Alcohol**
Cognitive rehabilitation	12 %	0 %	1 %	34 %
Multitrauma, burns and G-B syndrome.	21 %	25 %	9 %	45 %
Follow-up	21 %	20 %	7 %	47 %
Spinal cord injury and children/adolescents	21 %	27 %	8 %	45 %
Stroke	30 %	13 %	11 %	38 %
Traumatic brain injury	23 %	10 %	15 %	62 %
Assessment	23 %	1 %	3 %	26 %
Total	**22 %**	**8 %**	**5 %**	**35 %**

Table VII *Average risk for all screened patients in clinic*

5.0 Patient satisfaction

Sunnaas Rehabilitation Hospital conducts an internal User Survey on a continuous basis. The survey is carried out anonymously and all patients are invited to respond upon departure or by contacting the outpatient clinic. Results from the User Survey are published four times a year, and feedback is used for internal improvement work.
Sunnaas Hospital is also participating in a national survey of patient experience if inpatient stays in rehabilitation.
The User Survey at Sunnaas Hospital for the autumn of 2019 was evaluated. After the evaluation, changes were made to technical solutions, number of forms and users questions. The new solution would be easier to navigate for patients, and was adopted prior to summer 2020. The results of the patient satisfaction survey were published for patients, staff and stakeholders using:

- The User Committee (Brukerutvalget)
- The Youth Committee
- Annual performance information in the Quality Report
- At meeting forums at all levels in the hospital, including the board
- Fact sheet for look-ups in departments

Sunnaas' goal is for 60 % of patients who are discharged to respond to the survey.

By 2020, 54 % of patients responded to the User Survey (May-December)

It feels good to meet a professional team who actually understood who I am and what my situation is
(Quote from User Survey)

Of adult patients, 91w said they are satisfied with the services at Sunnaas Hospital

5.1 Response rate

In 2019, the response rate was very low (20 %) and various measures were taken to increase the response rate. In the second and third quarters of 2020, 776 patients responded to the User Survey. This constitutes 54 % of patients discharged in the period. This is a positive development since 2018 (48 %) and 2019 (20 %).

5.2 "All in all, how satisfied you are with your stay?"

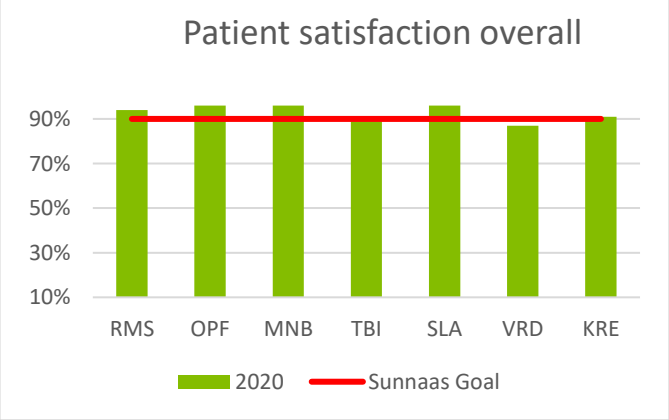


Figure XVII *Satisfaction per type of stay. KRE= Cognitive rehabilitation, VRD= Assessment Department, SLA= Stroke Department, TBI= Traumatic Brain Injury Department, RMS= Spinal Cord Injuries Department for Children and Adolescents, MNB= Multiple Trauma, Neurology and Burns Department, OPF*

In 2020, 91 % of adult patients responded that they were mostly satisfied with the services offered at Sunnaas Hospital. In free text comments, the professional level and competence of the staff are particularly highlighted. At the same time, some patients are calling for more and more varied activities.

5.3 "Goals for your stay were prepared with your help. Did you reach these goals?"

On the question of whether the goals set for the stay were reached, 62 % answered mostly or very much. Efforts are being made to set clear goals based on the individual needs of patients, and feedback on this question are followed up throughout the year. The question is not equally applicable to all types of patient stays, and there is a wide variation between the departments.

The goals were reset, but not necessarily for the stay but for the way forward
(Quote from User Survey)

Will need more months of targeted work to achieve my goals
(Quote from User Survey)

Secondary goals were also prepared/adjusted in cooperation with therapists
(Quote from User Survey)

5.4 National survey

Among adult patients who have been hospitalised for a minimum of 5 days at Sunnaas Rehabilitation Hospital, 78 patients (01.12.2019- 30.11.2020) answered the National Survey on Patient Experience for Inpatient Rehabilitation Stays.

The survey consists of 49 questions, and the preliminary summary from the Norwegian Institute of Public Health shows that the average scores from patients at Sunnaas Rehabilitation Hospital are equal to (or with small variations in a positive and negative direction) the scores at other rehabilitation institutions/departments on all questions. The results of the national survey are also consistent with the results of the internal survey at Sunnaas Hospital, and show that 86 % of patients are mostly satisfied with our services.

Very dedicated and knowledgeable staff who provide adequate time
(Quote from User Survey)

Patient satisfaction

Could have been better in terms of transfer to the municipality. A list of contacts should be prepared before departure
(Quote from User Survey)

Nice experience with everyone today (day of discharge). Everyone was helpful to me in the future.
(Quote from User Survey)

5.5 Patient complaints

Sunnaas Rehabilitation Hospital received a total of 26 and 24 written complaints in 2020 and 2019, respectively. This is an increase compared to the number of complaints from 2018 (11). The complaints have been dealt with in the current guidelines for handling complaints.

All feedback is processed systematically and analysed. Complaints are grouped within 5 areas; see Figure 18. We have chosen to categories complaints on conditions before the stay: Waiting time, rights complaints. Rights complaints involve a complaint about refusal of the right to rehabilitation by the specialist health services in the form of services at Sunnaas Hospital. Complaints during the stay: Treatment or incidents during the stay, case summary/reports, interaction/transfer to other institution/level).

The analysis is an important contribution to improvement and quality work at Sunnaas Hospital.

The hospital actively works for a culture of transparency, and patients are informed about their right to submit a formal complaint if they are not satisfied with what the hospital has offered or provided. Feedback and complaints from patients are an important part of improvement work at the hospital. One department initiated a quality improvement project in 2020. The aim was to improve the planning of discharge/transfer to another level/institution and to communicate better with patients and relatives about this.

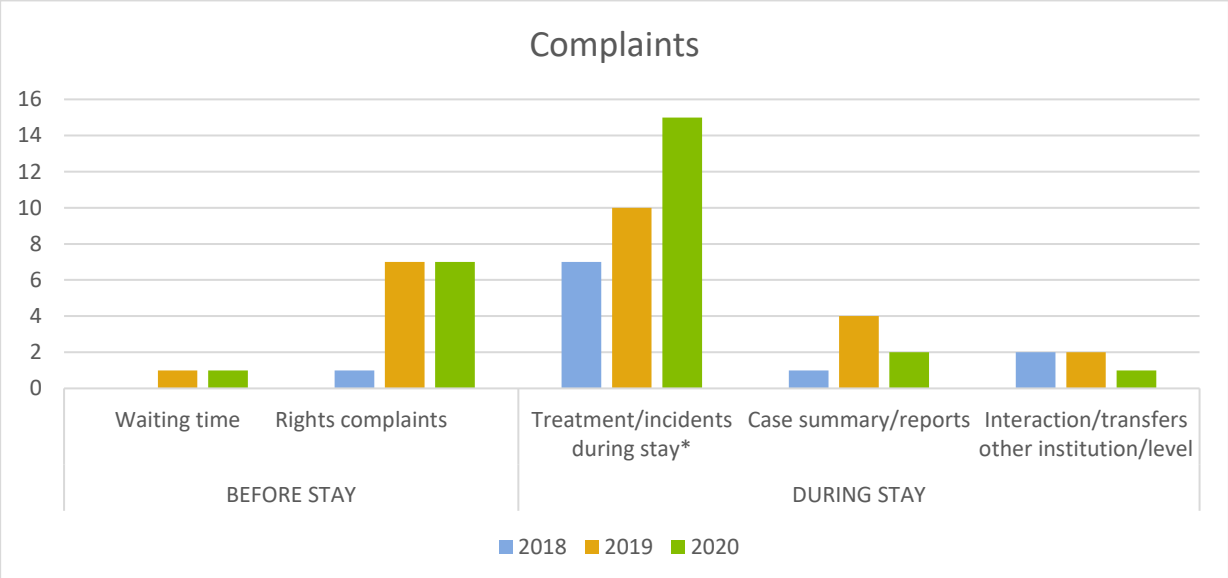


Figure XVIII *Complaints received by Sunnaas Rehabilitation Hospital in 2018, 2019 and 2020. *including: Decision-making process, professional assessment, discharge*

Summary

The Regional Sub-strategy for the Southeastern Norway Health Authority will be key in future work on patient safety and quality improvement in years to come

Goals:
- Reduce undesirable incidents
- Reduce undesirable variation

The national measures should be reached in the following areas of
- Patient health competence
- Safety-oriented management
- Competence on safety and quality improvement
- The region's efforts on national initiatives
- Systems and structures

6.0 Summary

Sunnaas Hospital's most important contribution to patients and relatives is to provide effective, highly specialised rehabilitation of the utmost quality. In 2021, we will continue to work on continuous improvement. One priority task is to draw up an action plan that is in line with the new regional sub-strategy for quality and patient safety. The aim of the sub-strategy is to reduce the risk of patient injury and reduce unwanted variation in supply and quality.

The pandemic has affected many hospital conditions, including the availability of services, and several of the indicators for waiting times have increased. Several measures have been implemented to bring down waiting time for rehabilitation. In order to ensure the availability of rehabilitation services, the hospital introduced an increased focus on digital services for patients and relatives in 2020.

During the pandemic, employees have demonstrated great skill and willingness to ensure good conditions for patients and colleagues. The pandemic also became an opportunity to find good solutions and implement new methods and intervene quickly.

Much hard work has been done on infection control, and no patients were diagnosed with a COVID-19 infection during their rehabilitation stay at Sunnaas Hospital in 2020.

The hospital has an overall goal of improving results that apply to activity, community participation and cost-effectiveness for all our rehabilitation programmes. By 2021, the goal is for all patients who are under rehabilitation at Sunnaas Hospital to be included in a quality register. Quality data from rehabilitation programmes will in the long term make it possible to measure the effectiveness of our service offers and provide better knowledge about the variations to the services we provide.

Information about our services: www.sunnaas.no.