1. Clinical Modules

The following summary tables are structured in line with main patient typologies described along this document it goes into details regarding each ward main characteristics, special considerations and following main 4S approach (Structures, Staff, Stuff, Systems)

COVID19 Screening and Triage

Descriptor: Provides a dedicated area for safe initial screening and triage of the patients with COVID 19 symptoms

Key Characteristics:

All health facilities, no matter the configuration, should introduce a screening and triage station at the entrance of the facility. The screening point will be the entrance point and identify those patients that fulfil the case definition of COVID19. The triage will be the area where, according to the triage-system chosen at the facility level, the acuity level of the patient will be defined. The area will have a reception area waiting room with independent cabins, and a sample area to collect testing.



- The screening and triage areas should consider adequately the flow between the different spaces to avoid crossing pathways.
- Screening and triage should be available 24/7 and staffed according to the needs, avoiding excessive waiting times and crowding.
- Patients wash hands at the entrance, every patient fitting the case definition should be provided a mask.
- Visitors should not be allowed to accompany the patient into the facility.
- Staff should wear a mask at all times and appropriate PPE when physically interacting with patients.
- Patients should be identified by bracelet and assigned a unique identifier. All patients, samples and documents should be identified by full name and the unique identifier.
- The triage area and facilities should be cleaned and disinfected after each patient-use.

Structure	Staff	Stuff	Systems
Facilities:	Average staff number: 17	Emergency Equipment:	Patient documentation:
Reception area, with patient's /Companion orientations.	FTE Nurses (4 nurses per shift) for the screening and triage management, additional staff and	Stretchers Set of emergency equipment	Patient record and unique identifiers (bracelets)
A screening place 7 Waiting room cabins (2mx2m)	profiles can be added as required (e.g. medical doctors) or staffing numbers can be expanded to overcome the busier	Laboratory sampling Equipment: Equipment for taking samples in a safe way	Oxygen system Set of emergency
Triage place A Sample area	periods. Rapid response team can be called in for critical	Personal Protective Equipment (PPE):	Air flow Ventilation Water:
and admissions area.	patients Security Guards, Cleaners and helpers as	Mask Gloves Eye protection	Water supply at lavatories and handwashing facilities at entrance of the facility
	required	Gown	Waste management:
Space needed: Variable, but usually 240 m ² and additional 240 m ² with an additional waiting area Design considerations: One-way flow	Indicative roles: Screening: to identify those patients fitting the case definition Triage: to assign the acuity level to each patient according to the chosen triage system Sampling: to take a lab sample for testing for COVID19 Cleaning: to clean and disinfect a specific area after use by each individual natient	Hand hygiene stations Full PPE for physical interaction with patients Patient observation: Thermometers Other equipment as required for use of the chosen triage system Administrative equipment and furniture: Enough chairs and tables to cover all the described facilities.	All waste bins considered as potentially infectious waste Sanitation: 2 accessible bathrooms (male and female) for the use of the patients Hygiene and environmental cleaning: Intensive regular cleaning on waiting areas and dedicated cleaners for Toilets after each use
	Staff Skills & Competencies: The staff at the screening area should be trained and updated regularly on eventual changes of the case definitions. The triage personnel should have specific training in application of a standardized, validated triage tool.	Patient documentation, bracelets, identifiers, pens and other stationary, computers	Electricity: 0 to 2kW depending on the electro-medical devices and computers and printers connected. Lighting: All areas perfectly illuminated. Ventilation: Natural. 60 l/s/patient

COVID19 Isolation of contacts and Mild suspected cases WARD 20 Beds

Descriptor:

Provides individually isolated accommodation and basic services for people who were in contact with confirmed patients in those settings where home-isolation is not possible or for mildly sick suspected patients.

Key Characteristics:

In certain environments it might be difficult for contacts or mildly sick patients at home. This might e.g. be the case in settings where larger families are living together in small, 1-room houses or in very remote areas. The facility will then provide individually isolation possibilities, where basic services as hygiene, food and basic healthcare are foreseen. This means that these residents will have individual cubicles with individual sanitary facilities and showers. Staffing levels will be lower since these patients are expected to be healthy and able to take care of themselves. A permanent presence of a medical doctor and a nurse should be considered to ensure follow up of the health of the present residents, emergency situations and care for chronic conditions.



- Individual cubicles with individual sanitary installations
- Residents leaving the cubicle should be wearing a mask and hand washing facilities should be widely available and their use promoted
- Patients should be well-informed and educated about COVID19, and the measures they need to keep in place to prevent cross-contamination.
- Staff to use new PPE for every patient contact. No cohorted care in these areas.
- Equipment used should be properly cleaned between each patient
- Permanent presence of health staff should be provided. The rapid response team can be used to staff a health post to follow up on development of symptoms, serve in emergencies or ensure treatment for chronic conditions
- Food, water, psychosocial support should be provided
- Patients should be offered the possibility to have contact with relatives, e.g. by use of their mobile phone.

 In a 20 beds ward for suspected cases, it is advised to allocate e.g. 4 beds for care for those patients that require high-level care but did not have a confirmed lab result yet. 				
Structure	Staff	Stuff	Systems	
Facilities:	Average staff number:1 head	Emergency Equipment:	Patient documentation:	
Ward with individual cubicles and private	nurse and sufficient helpers/cleaners (e.g. 8,5 FTE)	Basic resuscitation equipment available on the ward (ambu-bag)	Patient record Referral system:	
showers Bed capacity 20	Healthcare can be provided from a health post that is staffed by the rapid	Specialised emergency equipment provided by the rapid response team in case needed	Good and rapid access for referral of symptomatic contacts for testing and for suspected patients receiving	
4 ICU beds	response team staff.	All required ICU-equipment for ICU-beds if	positive test results. A referral system should	
	1 ICU-nurse in every shift for every 2 ICU-beds if	implemented.	also be available for patients whose medical condition deteriorates.	
Space needed: 448 m ² Internal	implemented	Personal Protective Equipment (PPE):	Oxygen system	
considering safety distances and supplementary	Indicative roles:	Masks for staff and patients	Oxygen only needed at the health post and in the emergency	
modules 648 m ² external l	Head nurse: organising the ward	Mask	equipment	
dimensions	e.g. discharges and admissions,	Gloves	Air flow Ventilation system	
See detailed Bill of	referrals, supervising the	Gown	Natural ventilation 60	
Quantities in Annex 2 and Excel BoQ	cleaners/helpers	Hand hygiene stations	portable ventilation HEPA filter systems	
tools	Cleaners and helpers: keep the	Sufficient numbers of PPE needed since these	Water:	

Design	ward clean and	patients are isolated	Water supply at
considerations:	serve food and	individually	lavatories and
	other services		handwashing facilities at
Individual cubicles		Patient observation:	each toilet cubicle
with three potential	Rapid Response	Thermometer to be	
configurations see	Team: provide a	provided to each individual	Waste management:
Annex 1 for detailed	health post	patient for self-monitoring	All waste bins considered
Information		and / or to the health post	as potentially infectious
		responsible to follow-up on	waste, available bins in
	Staff Skills &	all the patients	all beds
	Competencies:		
	Cood	Full set of vital sign	Sanitation:
	Good	monitoring equipment at	20 accossible bathrooms
	knowledge of	the health post, to be	(male and female) for the
	IPC and cleaning	cleaned properly between	individual use of the
	practices	each use.	nations or 2 gender
	Rapid Response	Administrative equipment	separated bathrooms
	Team skilled in	and furniture	with dedicated cleaners
	basic healthcare,	and furniture.	that will clean and
	emergency care.	Chair and bed for each	disinfect after each use
		patient	disinicet after caen use
			Hygiene and
		All equipment and	environmental cleaning:
		furniture easy to clean	Intensive regular cleaning
		Patient records, stationary	on ward, intensive
		and furniture for staff to	terminal cleaning of bed
		work efficiently	and toilet potentially
		Madiaation and	Dedicated cleaners for
		iviedication and	Toilets after each use
		consumables	Flectricity
		Medication and	Licentery
		consumables to ensure	Wall Sockets for all cubicles
		care for chronic conditions	Hallways latrings and
			showers well lighted
		Medication and	showers wen lighted
		consumables for	
		emergency care: full set of	
		emergency equipment	
		available for the rapid	
		response team	
		(uenormator, suction unit,	
		had value ventilation and	
		bag-valve ventilation,	
		medication	

Mild and Moderate Confirmed cases WARD 40 Beds

Descriptor:

Provides cohorted care for patients that are mild or moderately sick and have received a positive labresult.

Key Characteristics:

These wards provide care in cohorts for 40 patients. There is no need for isolation at the individual level since all these patients are confirmed COVID19 patients. Therefore, sanitary facilities can also be shared. Since these patients are not very dependent on medical care, staffing requirements are medium.



- Staff should wear PPE at all times when working in the ward
- Mild and moderately sick patients will require some nursing care e.g. for distribution of medication, oxygen therapy and patient observations
- Oxygen therapy could be initiated for moderately sick patients and then should be guided by oxygen saturation.
- The medical doctor of the rapid response team can provide medical supervision for these patients.

Structure	Staff	Stuff	Systems
Facilities:	Average staff	Emergency Equipment:	Patient documentation:
Ward with	number:1 nead	Basic resuscitation	Patient record
shared toilets	helpers/cleaners	equipment available on	
and showers,	(e g 8 5 FTF)	the ward (ambu-bag)	Referral system:
access to a	(0.8.0,3112)	Specialized emergency	Good and rapid access for
/rest area	8,5 FTE nurses and	equipment provided by	referral of symptomatic
could be	8,5 FTE nurse	the ranid response team	contacts for testing and
provided (e.g.	assistants (2 each	in case needed	for suspected patients
movie shown	per shift)	in case needed	receiving positive test
or games to	Medical supervision	Personal Protective	results. A referral system
play)	can be provided	Equipment (PPE):	should also be available
Crash room at	from a health post	Mask	for patients whose
triage	that is staffed by the	indok	medical condition
Storilization	rapid response team	Gloves	deteriorates.
area	staff.	Eye protection	Oxygen system
Morgue		Gown	Oxygen only needed at the
Bed canacity	Indicative roles:		health post and in the
40 beds		Hand hygiene stations	emergency equipment
	Head nurse:	Patient observation:	Air flow Ventilation
	organising the ward	Sufficient sets of	system
Space needed: 448	e.g. discharges and	monitoring aquinment	
m ² Internal	aumissions,	(blood pressure cuffs	Natural ventilation 60
dimensions,	the cleaners /helpers	clock/watch with second	I/s/patient supported by
considering safety	the cleaners/helpers	hand, oxygen saturation	filter systems
supplementary	Cleaners and	monitors)	inter systems
modules 648 m ²	helpers: keep the	,	Water:
external l	ward clean	Administrative	Water supply at layateries
dimensions	Nurses: distribute	equipment and	and handwashing facilities
	medicines, provide	furniture:	at each shared toilet
	oxygen, assure	Chair and bed for each	
See detailed Bill of	adequate	patient	Waste management:
Quantities in Annex	observations of the		All waste bins considered
2 and Excel BOQ too	patients	All equipment and	as potentially infectious
	Nurse essistents	runniture easy to clean	waste, available bins in all
Design	serve food and other	Patient records,	beds
considerations:	services	stationery and furniture	
Individual beds		for staff to work	Sanitation:
separated by Panels	Rapid Response	efficiently	2 accessible bathrooms
and safety distance	Team: provide a	Medication and	(toilet and shower (gender
in a cohorted area.	medical supervision	consumables	and accessible) for the use
with privacy		· · · · ·	of the patients
30100113		Medication and	Hygiono and
	Staff Skills &	consumables to ensure	nygielle alla
	Competencies:	care for acute and	Intensive regular cleaning
		chronic conditions	on ward and toilets.

Good knowledg of IPC and	e Oxygen provision equipment	intensive terminal cleaning of bed
cleaning practic Nurses skilled in patient observation and oxygen therapy Rapid Response Team skilled in basic healthcare emergency care	es Medication and consumables for emergency care: full set of emergency equipment available for the rapid response team (defibrillator, suction unit, IV access, intubation and bag-valve ventilation, medication)	Electricity Wall Sockets for all bed panels. If X-rays are portable, there should be dedicated power outlets for them.

COVID19 Severe Confirmed cases WARD 40 Beds

Descriptor:

Provides cohorted care for patients that are severely sick and have received a positive lab-result

Key Characteristics:

These wards provide care in cohorts for 40 patients. There is no need for isolation at the individual level since all these patients are confirmed COVID19 patients. Therefore, sanitary facilities can also be shared. Since these patients are severely sick, higher medical staffing levels are required.



- Staff should wear PPE at all times when working in the ward
- Severely sick patients will have high demands in nursing and medical care
- Oxygen therapy will likely be required for all patients and then should be guided by oxygen saturation.
- In a facility that has no dedicated ICU, it is advised to allocate e.g. 4 beds for care for those patients that require critical care.

Structure	Staff	Stuff	Systems
Facilities:	Average staff number:1	Emergency Equipment:	Patient
Ward with	head nurse and	Basic resuscitation	documentation:
shared	sufficient	equipment available on	Patient record
toilets and	neipers/cleaners (e.g.	the ward (ambu-bag)	
showers	0,5 FIE)		Referral system:
Sterilization	21 FTE nurses (1 for	specialised emergency	Good and rapid access
area	every 8 patients in	the ranid response team	for referral of
Morgue	every shift) and 17 FTE	in case needed	symptomatic contacts
morgae	nurse assistants (1 each		for testing and for
	for every 8 patients per	All required ICU-equipment	suspected patients
Bed capacity	word during night)	for ICU-beds if	receiving positive test
40 beds of	waru uuring night)	implemented.	results. A referral
which e.g. 4	1 ICU-nurse in every		system should also be
ICU beds if	shift for every 2 ICU-		whose medical
there is no dedicated	beds if implemented	Personal Protective	condition deteriorates.
ICU in the		Equipment (PPE).	
facility		Mask	Oxygen system
	3 FIE physiotherapists	Gloves	Oxygen only needed at
	(or national equivalent)		the health post and in
Space needed:	1 FTE occupational	Eye protection	the emergency
448 m ² Internal	therapists (or national	Gown	equipment
considering	equivalent)		Air flow Ventilation
safety distances		Hand hygiene stations	system
and		Patient observation:	
supplementary		Sufficient cots of	Natural/Hybrid/Mecha
modules 648 m ⁻	Indicative roles:	Sufficient sets of	l/s/natient supported
dimensions	Head nurse: organising	(blood pressure cuffs	by portable ventilation
	the ward e σ	clock/watch with second	HEPA filter systems
	discharges and	hand, oxygen saturation	Water:
See detailed Bill	admissions, referrals,	monitors)	Mater currely at
of Quantities in	supervising the nurses,	Administrativo	water supply at
Annex 2 and	nurse assistants and	equinment and furniture	handwashing facilities
	cleaners/helpers		at each shared toilet
	Cleaners and helpers:	Chair and bed for each	
Design	keep the ward clean	patient	Waste management:
considerations:	N. 15 1 1	All equipment and	All waste bins
Individual bode	Nurses: distribute	furniture easy to clean	considered as
senarated by		Patient records	potentially infectious
Panels and safety	adequate observations	stationery and furniture	waste, available bins in
distance in a	of the patients	for staff to work	all beds
cohorted area.		efficiently	Sanitation:
With privacy	Nurse assistants: serve		
screens	Tood and other services	iviedication and	Z accessible bathrooms (toilet and shower
		consumables	(conter and accessible)
		Medication and	(Bender and accessible)
		consumables to ensure	

Ward doctor: ensure	care for acute and chronic	for the use of the
medical supervision of	conditions	patients
the patients	Oxygen provision	Hygiene and
Rapid Response Team: provide emergency care in case of deteriorating patient Physiotherapist (or national equivalent): Respiratory interventions and mobilization Occupational therapist (or national equivalent): Cognitive and functional assessment	equipment Medication and consumables for emergency care: full set of emergency equipment available for the rapid response team (defibrillator, suction unit, IV access, intubation and bag-valve ventilation, emergency medications)	environmental cleaning: Intensive regular cleaning on ward and toilets, intensive terminal cleaning of bed Electricity Wall Sockets for all bed panels. If X-rays are portable, there should be dedicated power outlets for them.
Staff Skills &		
Competencies: Good knowledge of IPC and cleaning practices Nurses skilled in patient observation and oxygen therapy Rapid Response Team skilled in basic healthcare, emergency care Rehabilitation professionals skilled in general medical and pulmonary rehabilitation (for physiotherapists and occupational therapists);		

COVID19 Critical Confirmed cases WARD 40 Beds

Descriptor:

Provides a dedicated ICU area where treatment of critical cases can be provided.

Key Characteristics:

Critical cases are admitted in a ward area with preferably less beds to ensure enough working space around each bed. These patients will require artificial ventilation and invasive monitoring and therefore, staffing level requirements (both in numbers and in qualifications) will be very high.



- Very high requirements in specialised staff
- Staff should wear PPE at all times
- Requirements in sanitation will be lower as these patients are bed-bound.
- High needs in specialised equipment, medicines and consumables

Structure	Staff	Stuff	Systems
Facilities:	Average staff number:1 head nurse and	Emergency Equipment:	Patient documentation:
ward with sufficient space around each	sufficient helpers/cleaners (e.g.	Basic resuscitation equipment available at	Patient record
Crash room	8,5 FTE)	each bed (ambu-bag). Specialised emergency	Referral system:
at triage	42 FTE nurses (1 for every 2 patients in every	equipment available on key places in the ward	Good and rapid access for referral of
area	shift) and 8,5 FTE nurse assistants (2 per shift)	(multiple sets)	recovering patients that can move back to a
Morgue	8,5 FTE ICU doctors (2	Equipment (PPE):	ward for severe patients or step-down
Bed capacity 20	3 FTE physiotherapists	Mask (N95 if aerosol procedures are performed)	area
beds	(or national equivalents), 1 FTE	Gloves	Oxygen and ventilator
m ² Internal dimensions.	speech and language therapist (or national	Eye protection	available for every bed.
considering safety distances and	equivalent	Gown Hand hygiene stations	Air flow Ventilation system
supplementary modules 648 m ²		Patient observation:	Natural/Hybrid/Mechan ical ventilation 160
external l dimensions	Indicative roles:	Intensive care continuous	l/s/patient supported
	Head nurse: organising the ward e.g. discharges	Administrative equipment	HEPA filter systems
See detailed Bill of Quantities in Annex	and admissions,	and furniture:	Water:
2 and Excel BoQ tool Design	the nurses, nurse assistants and	All equipment and furniture easy to clean	lavatories and
considerations: Individual beds	cleaners/helpers	Patient records, stationary and furniture for staff to	at each shared toilet
separated by cubicles cohorted	Cleaners and helpers: keep the ward clean	work efficiently	Waste management:
area	Nurses: distribute	Medication and	All waste bins
	oxygen, assure	consumables	considered as potentially infectious
	of the patients	Medication and consumables to ensure	all beds
	Nurse assistants: serve food and other services	care for acute and chronic conditions	Sanitation:
	ICU doctor: ensure	Oxygen provision	2 accessible bathrooms (toilet and shower
	the patients	ventilators	(gender and accessible) for the use of the
	Rapid Response Team: provide emergency care	Suction units at each bed	patients or staff
	in case of deteriorating patient	Multiple sets of medication and consumables for	environmental cleaning: Intensive

Physiotherapist: specialist respiratory interventions and early mobilization Speech and language therapist: swallow assessment and interventions (conducted once patients have de- escalated to other wards)	emergency care: full set of emergency equipment available on key places in the ward (defibrillator, suction unit, IV access, intubation and bag-valve ventilation, emergency medications) Continuous infusion pumps for medications	regular cleaning on ward and toilets, intensive terminal cleaning of bed Electricity Several Wall Sockets for all cubicles See detailed Bill of Quantities in Annex 2 and Excel BoQ tools
Staff Skills & Competencies: Good knowledge of IPC and cleaning practices Nurses and doctors skilled in intensive care observation and management Rapid Response Team skilled in basic healthcare, emergency care Physiotherapist Skills in specialist respiratory interventions Speech and language therapy Skills in post-ICU assessment and intervention		

COVID19 Step down cases WARD 20 Beds

Descriptor:

Provides a dedicated inpatient area where patients recovering from severe COVID-19, who are not ready for or able to be discharged, will receive rehabilitation and nursing support for an interim period.

Key Characteristics:

In centres where severe and ICU cases are being managed, it is essential to consider a dedicated inpatient area where recovering severe cases will be cared for an interim period. This may be known as a "stepdown area". Recovering severe cases are likely to present with ongoing challenges that will delay safe discharge, including post-intensive care syndrome (PICS) and may require some ongoing respiratory support, but they will also require lower medical and nursing staffing ratios than severe cases. It is common for patients with severe cases, especially those who have been mechanically ventilated, to experience substantial weakness and functional decline. When this is the case, some patients may require a period of inpatient recovery in a stepdown ward before being discharged home. These wards provide care in cohorts of 20 patients (10 per gender), with a dedicated space left open for rehabilitation activities. These wards are designed for COVID19 positive patients, therefore there is no need for isolation at the individual level and sanitation facilities can be shared. These patients are no longer severely sick, so lower medical staffing levels are required, while rehabilitation staffing levels are higher. Permanent nursing presence in the ward is still required.



- Staff should wear PPE at all times in the ward, including for airborne precautions when performing relevant procedures
- Lower needs in medicines and consumables, although it should be expected that patients will likely require dressings for pressure areas
- Most patients will require some nursing care e.g. for distribution of medication, mobility assistance and patient observations
- Staff should wear PPE at all times when working in the ward
- The medical doctor of the mild-moderate ward can provide medical care to these patients
- Equipment used should be properly cleaned between each patient

• Permanent presence of health staff should be provided

- Patients should be encouraged to have contact with relatives, e.g. by use of their mobile phone.
- Separate step down areas for (recovering) COVID negative patients should be considered.

Structure	Staff	Stuff	Systems
Facilities:	Average staff number:	Personal Protective Equipment (PPE):	Referral system:
Small Rehabilitation/relaxation space; Bed capacity 20 beds	Medical, nursing and support staffing based on mild/moderate ward cover.	Adequate PPE for staff Rehabilitation specific equipment:	Good and rapid access for referral of patients from mild-severe wards (patients should not be
Space needed: 448 m ² Internal dimensions, considering safety distances and supplementary modules 648 m ² external, Equivalent to 20 bed ward area	10 FTE rehabilitation professionals with the suggested composition of (where locally applicable): 3 FTE physiotherapists (2	 4x tables and 10 basic chairs for table-based activities and meals 4 x inpatient wheelchairs 4 x pulpit/gutter frame 8 x four-wheel walker/walking frame 	referred directly from ICU/critical care) Ensure clear referral criteria established: Consider the
See detailed Bill of Quantities in Annex 2 and Excel BoQ too	per shift); 3 FTE occupational therapists (2 per shift); 1FTE speech	 Elastic exercise bands of varying resistance or 4 sets of free weights (or locally manufactured 	following: - Has significantly
Design considerations:	and language therapist; 1FTE	equivalent) for basic	reduced function from
Individual beds separated by Panels and safety distance in a cohorted area; Divide bed-portion of the ward in two for single-gender use (10 beds each side);	psychologist. NOTE: rehabilitation professionals are not required to work overnight in stepdown	 strengthening. Over toilet-frame (1 per toilet) and/or 2 portable commodes Shower chair with back and armrests (1 per shower) Equipment for basic food preparation/assembly 	baseline and is not suitable for discharge (considering support available at home) - Is medically
	Indicative roles:	 (not for cooking) Table-based games, e.g., cards, board 	- Able to
	Physiotherapist (or national equivalent): Functional rehabilitation, graded exercise, basic respiratory interventions, and balance training	games, puzzles Access to supportive discharge equipment (a small number of walking frames and wheelchairs) is desirable	participate in rehabilitation Established referral links with local outpatient and community- based rehabilitation

Occupational therapist (or national	services for follow-up.
equivalent): Cognitive assessment and	
intervention, occupational-based	
exercise, activity of daily living retraining,	
discharge planning	
Speech and language therapist (on national equivalent):	
assessment and intervention, speech assessment and retraining	
Psychologist (or national equivalent): Counselling and other psychological techniques	
Staff Skills & Competencies:	
Good knowledge of IPC and cleaning practices; psychological first aid.	
Nurses skilled in patient observation and oxygen therapy	
Rapid Response Team skilled in basic healthcare, emergency care	
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in post-ICU, including swallow	
rehabilitation	
(for speech and	
language	
therapists);	
in trauma	
counselling (for	
psychologistsy	