



RESEARCH INSTITUTE
FOR HEALTHCARE
ORGANIZATION
AND MEDICAL
MANAGEMENT

MODERN RUSSIAN AND FOREIGN METHODS OF PROTECTING MEDICAL PERSONNEL FROM CONTRACTING A NOVEL CORONAVIRUS INFECTION (COVID-19)

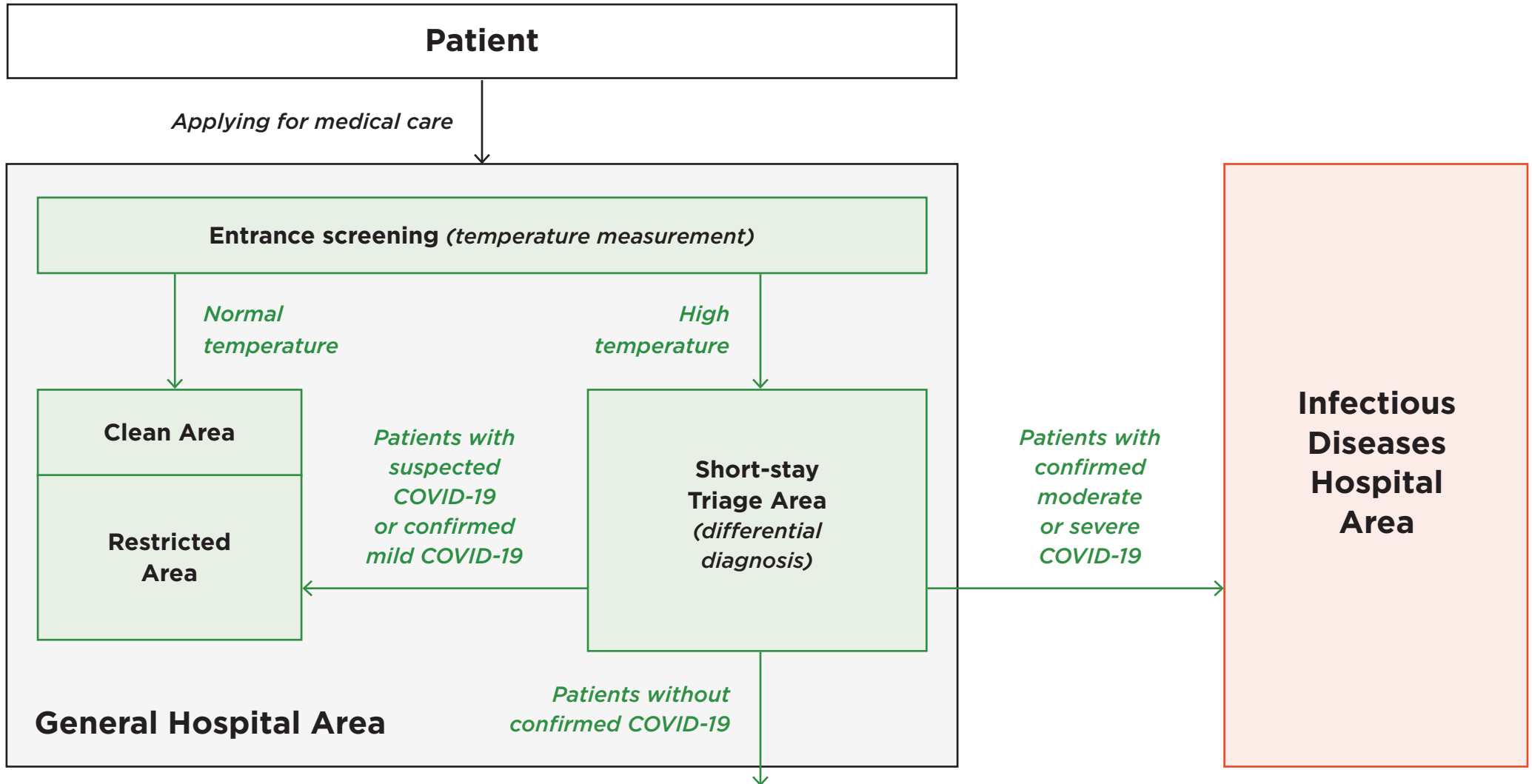


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Ensuring triage, early recognition, and source control



2

Applying standard precautions for all patients

A median sagittal plane of an exhaled air jet from the patient:



without wearing a mask — **68 cm;**



wearing a surgical mask — **30 cm;**



wearing a N95 mask — **15 cm**

Standard precautions for all patients:

- using a mask,
- regular hand sanitizing,
- washing hands with soap,
- wearing gloves,
- avoiding contact with eyes, nose and mouth,
- using a handkerchief when coughing or sneezing,
- maintaining a social distance of 1.5 meters.



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Implementing empiric additional precautions for suspected or confirmed COVID-19 patients

Risk of medical worker contamination

Low risk

(providing direct care to COVID-19 patients in the absence of aerosol-generating procedures)

Standard precautions

High risk

(providing direct care to COVID-19 patients in settings where aerosol-generating procedures are frequently in place)

Additional precautions

Setting	Activity	Type of PPE					
		Medical mask	Gowns	Gloves	Eyes protection (goggles or face shield)	Respirator N95 or FFP2 or FFP3 or similar	Apron
Patient room	Providing direct care to COVID-19 patients, in the absence of aerosolgenerating procedures	+	+	+	+	-	-
	Providing direct care to COVID-19 patients in settings where aerosolgenerating procedures are frequently in place	-	+	+	+	+	+
Ambulance or transfer vehicle	Transporting suspected COVID-19 patients to the referral health care facility	+	+	+	+	-	-
Waiting room	Patients with symptoms suggestive of COVID-19	+	+	+	+	-	-
	Patients without respiratory symptoms	-	-	-	-	-	-
Administrative areas	Administrative tasks that do not involve contact with COVID-19 patient	-	-	-	-	-	-

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Implementing administrative controls

Administrative controls include ensuring:

- resources for infection prevention and control measures,
- adequate supplies (especially PPE),
- facilitated access to laboratory testing,
- appropriate triage and placement of patients,
- adequate staff-to-patient ratios,
- training of staff.

Strategies to optimize supplies:

- 1) Normally functioning healthcare system – medical masks are used for droplet protection.
- 2) Healthcare system under unforeseen circumstances – rational supplies management by cancelation of all non-urgent procedures, removing facemasks from other facilities and implementing extended use of facemasks.
- 3) Healthcare system in crisis capacity – the second strategy methods are complemented by re-using of face masks or even prioritizing facemasks for healthcare workers in high risk of contamination over those with low risk.

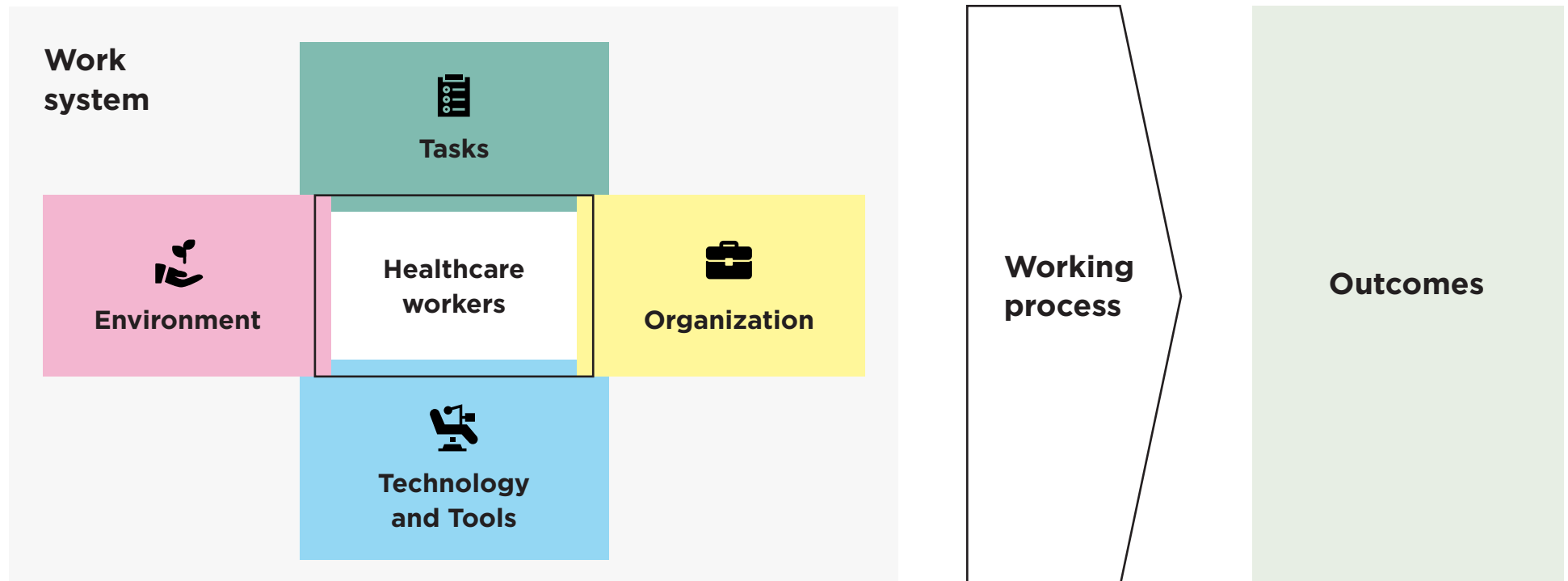


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Environmental and engineering controls

Main purpose is to reduce the spread of pathogens and the contamination of surfaces by:

- providing adequate space to allow social distance of at least 1 m to be maintained between patients and healthcare workers;
- ensuring the availability of well-ventilated isolation rooms for patients with suspected or confirmed COVID-19;
- adequate environmental cleaning and disinfection.



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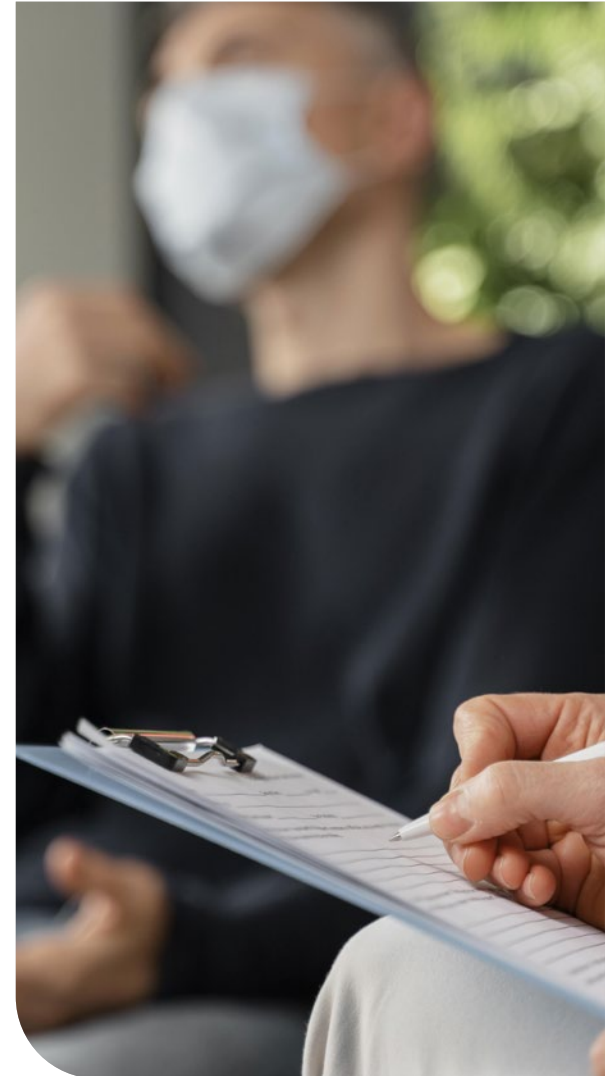
Mental health support for healthcare workers

Main problems:

- longer hospital shifts;
- risk of contamination;
- stress;
- separation from family and friends;
- stigmatization.

Main solutions:

- control over the working hours;
- creation of comfortable rest rooms;
- maintaining a balanced diet;
- decent salary;
- clear instructions;
- creation of an atmosphere of mutual assistance and support in the team;
- providing free access to psychological assistance.





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**THANK YOU
FOR YOUR ATTENTION!**



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