

**Supplementary materials**  
**S1. Questionnaire: CoREM-NUM survey**  
**University Hospital Augsburg**

**1. Basic data**

1.1 Have you already participated in the 1st part of survey?

- Yes
- No

1.2 In which federal state is your medical facility located?

- Baden-Wuerttemberg
- Bavaria
- Berlin
- Brandenburg
- Bremen
- Hamburg
- Hesse
- Mecklenburg-Western Pomerania
- Lower Saxony
- North Rhine-Westphalia
- Rhineland-Palatinate
- Saarland
- Saxony
- Saxony-Anhalt
- Schleswig-Holstein
- Thuringia

1.3 What are the first two digits of your facility's zip code?

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1.4 Please enter below the first two letters of your mother's maiden name and the first two letters of your father's first name.

*(This code is used to better allocate the two-sided questionnaire to each other and does not allow any conclusions to be drawn about your person/practice/department)*

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1.5 Type of facility

- Hospital
- Private practice *(medical facility without bed occupancy)*

1.6 Which specialty do you belong to?

- Gastrointestinal Endoscopy
- Otorhinolaryngology
- Dental Medicine
- Maxillofacial Surgery
- Other: \_\_\_\_\_

1.7 How many procedures did you perform on average per year before the start of the pandemic?

- <1000
- 1001-2000
- 2000-3000
- 3001-4000
- 4001-5000
- 5001-6000

- 6001-7000
- >7001

1.8 How many employees work in your respective department (e.g. endoscopy department/ entire private practice)?

1.9 How many employees were infected with SARS-CoV-2 in Q1 and Q2 2021?

- \_\_\_\_\_
- None

## 2. Protective Measures

2.1 What prophylactic protective measures have been added to the pre-pandemic personal protective equipment?

- Mouth-nose protection
- FFP2/N95 or FFP3 masks
- Water repellent gowns
- Goggles/visor
- Ventilation between procedures
- Other: \_\_\_\_\_

2.2 Have you changed prophylactic personal protection measures of your employees compared to 2020?

- Yes
- No

2.3 What are the reasons for the change in protective measures?

- Variants of concern
- Availability of protective equipment
- Vaccination of the workforce
- Other: \_\_\_\_\_

2.4 How often you and your employees used/use the following personal protective measures

2.4.1 In the 1. calendar quarter 2021 (01.-03.2021):

a) Mouth-nose-protection	b) FFP2/N95 or FFP3 masks	c) Protective gown	d) Protective goggles or /Visor?	e) Ventilation between procedures
- always	- always	- always	- always	- always
- mostly	- mostly	- mostly	- mostly	- mostly
- often	- often	- often	- often	- often
- rarely	- rarely	- rarely	- rarely	- rarely
- never	- never	- never	- never	- never

2.4.2 In the current calendar quarter (since 04.2021):

a) Mouth-nose-protection	b) FFP2/N95 or FFP3 masks	c) Protective gown	d) Protective goggles or /Visor?	e) Ventilation between procedures
- always	- always	- always	- always	- always
- mostly	- mostly	- mostly	- mostly	- mostly
- often	- often	- often	- often	- often
- rarely	- rarely	- rarely	- rarely	- rarely
- never	- never	- never	- never	- never

2.4 By how much have procedures become more time-consuming due to your hygiene concept/additional prophylactic protective measures?

- By < 25%
- By >25% bis 50%
- By > 50 -75%
- By 100%
- Procedures have not become more time-consuming

### 3. Pre-interventional testing

3.1 Has the strategy of pre-interventional testing of patients for SARS-CoV-2 changed compared to 2020?

- No
- Yes

3.1.2 Which reasons are responsible for the change?

- Variants of consents
- Corona Test Offensive
- Availability of tests
- Other: \_\_\_\_\_

3.2 What method did you use to test your patients pre-interventionally or what test did you ask for?

a) Year 2020 (Q2 –Q4)

- We tested/test pre-interventionally for SARS-CoV-2 predominantly by PCR
- We tested/test pre-interventionally for SARS-CoV-2 predominantly by antigen test
- We requested/request mainly an externally performed current PCR test for SARS-CoV-2
- We requested/required mainly an externally performed current antigen test for SARS-CoV-2
- We did/do not perform pre-interventional testing for SARS-CoV-2

b) Year 2021 (Q1-Q2)

- We tested/test pre-interventionally for SARS-CoV-2 predominantly by PCR.
- We tested/test pre-interventionally for SARS-CoV-2 predominantly by antigen test.
- We requested/required mainly an externally performed current PCR test for SARS-CoV-2
- We requested/required mainly an externally performed current antigen test for SARS-CoV-2
- We did/do not perform pre-interventional testing for SARS-CoV-2

### 4. HCW testing

4.1 Do you offer your employees the opportunity to be tested for SARS-CoV2 infection?

- Yes
- No

4.2 For which reasons?

- Variants of concerns
- Corona Test Offensive
- Availability of tests
- Other: \_\_\_\_\_

4.3 Which method can your employees use to get tested for SARS-CoV-2?

- PCR
- Antigen rapid test
- Antibody test
- Other: \_\_\_\_\_

4.4 How often can your employees get tested for SARS-CoV-2?

- Daily
- Weekly
- Testing is the responsibility of the employee
- Other: \_\_\_\_\_

## 5. Infections among HCW

5.1 How many employees were already infected by SARS-CoV-2?

5.2 How many of the SARS-CoV-2 infected employees were most likely infected in the following situations?

- In private environment
- At work (e.g. during interventions)
- At work (other patient contact, e.g., registration)
- At work (without patient contact, e.g., during break)
- Unclear source of infection

5.3 Did fully vaccinated employees get infected with SARS-CoV-2?

- Yes
- No
- Unknown

5.4 How many employees get infected with SARS-CoV-2 in following time frame?

- < 1 week after becoming fully-vaccination
- > 1 week after becoming fully-vaccination

## 6. Financial implications of the COVID-19 pandemic

6.1 Are your increased expenses due to your hygiene concept sufficiently covered by billing flat rates or other funds? (*Question only for private practices*)

- Yes
- No

6.2 To what extent did you suspend procedures due to the pandemic?

a) In the 1. calendar quarter 2021 (01.-03.2021)      b) In the current calendar quarter

- |  |  |
|--|--|
| • Not at all   | • Not at all   |
| • Cancellation of up to 50% of elective procedures     | • Cancellation of up to 50% of elective procedures     |
| • Cancellation of more than 50% of elective procedures | • Cancellation of more than 50% of elective procedures |
| • Cancellation of all elective procedures              | • Cancellation of all elective procedures              |

6.3 What were/are the predominant reasons for the cancellation of elective procedures?

a) In the 1. calendar quarter 2021 (01.-03.2021)      b) In the current calendar quarter

- |                                    |                                    |
|------------------------------------|------------------------------------|
| • Voluntarily preventive           | • Voluntarily preventive           |
| • Ordered by the health department | • Ordered by the health department |
| • Due to staff shortage            | • Due to staff shortage            |
| • Due to patient shortage          | • Due to patient shortage          |

## 7. Vaccination progress among HCW

7.1 How high do you assess the percentage of fully-vaccinated employees in your medical department/private practice?

a) Physicians

- below 20 %
- 20 % to < 40 %
- 40 % to < 60 %
- 60 % to < 80 %
- 80 % to 100 %

b) Nurses

- below < 20 %
- 20 % to < 40 %
- 40 % to < 60 %
- 60 % to < 80 %
- 80 % to 100 %

7.2 Does the percentage of fully-vaccinated employees in your medical department/private practice meet your expectations?

a) Physicians

- Yes, completely
- No, it exceeds my expectations
- No, it is below my expectations

b) Nurses

- Yes, completely
- No, it exceeds my expectations
- No, it is below my expectations

7.3 Are you vaccinated against SARS-CoV-2?

- Yes
- No
- No answer

7.4 Do you feel to be at higher risk of SARS-CoV-2 infection due to your occupation compared to the general population?

- Totally agree
- Rather true
- Neutral
- Rather disagree
- Totally disagree

7.5 Did you feel to be at higher risk of infection due to your professional activity compared to the general population prior to your vaccination?

- Totally agree
- Rather true
- Neutral
- Rather disagree
- Totally disagree

7.6 Have your concerns regarding increased risk of SARS-CoV-2 infection been reduced by vaccination?

- Yes
- No

7.7 Which aspects of your professional activity do you consider to be particular risk factors?

- Close contact with patients
- Facial /aerosol-generating procedures
- Long stay in the same room with patients
- Contact frequency due to professional activity
- Frequent asymptomatic courses of SARS-CoV-2 infection
- Uncompliant patients
- Low sensitivity of rapid antigen tests
- Mutations of the virus

## 8. Support in the defeating the COVID-19 pandemic

8.1 Was it possible to supply protective equipment in an adequate manner (price/quantity) for you and your workforce at the beginning of the pandemic?

- Totally agree
- Rather true
- Neutral
- Rather disagree
- Totally disagree

8.2 Did you have sufficient information material at the beginning of the pandemic to create a hygiene concept for your medical department/private practice?

- Totally agree
- Rather true
- Neutral
- Rather disagree
- Totally disagree

8.3 Did you have sufficient support creating a hygiene concept for your medical department/private practice?

- Totally agree
- Rather true
- Neutral
- Rather disagree
- Totally disagree

## 9. Feedback

In your opinion, what would be important to manage effectively in the event of a reoccurrence of a pandemic?

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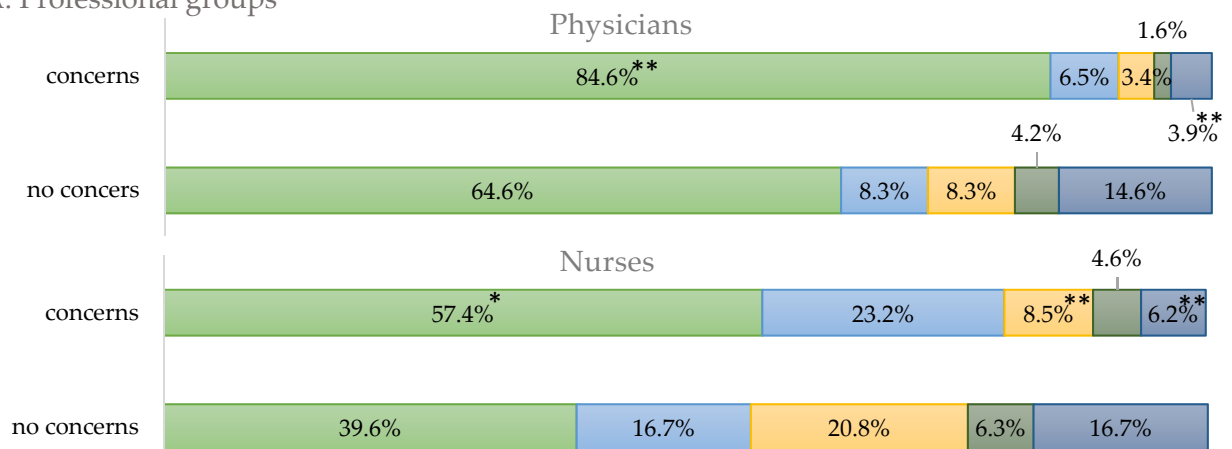
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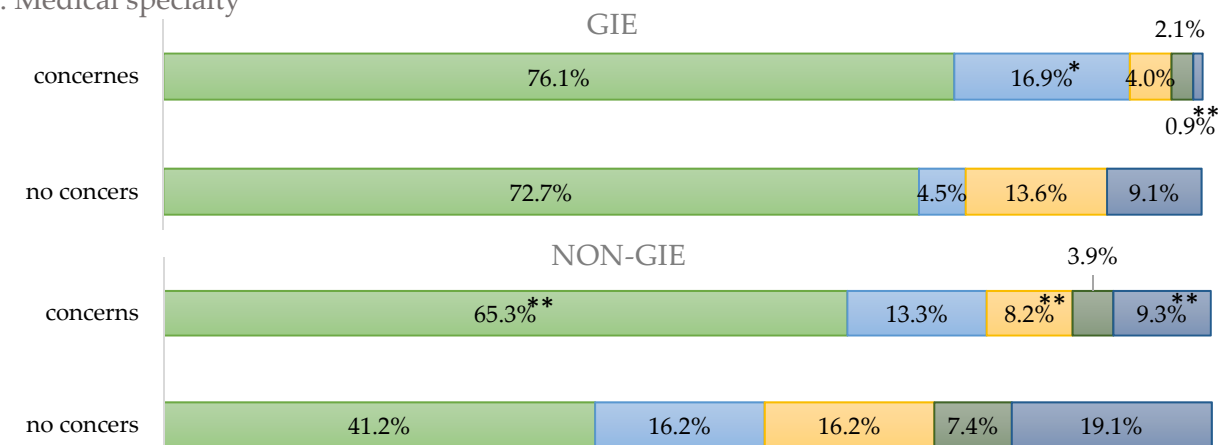
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## Supplementary materials S2: Vaccination rate depending on perceived risk of SARS-CoV-2 infection

### A: Professional groups



### B: Medical specialty



### C: Healthcare delivery setting

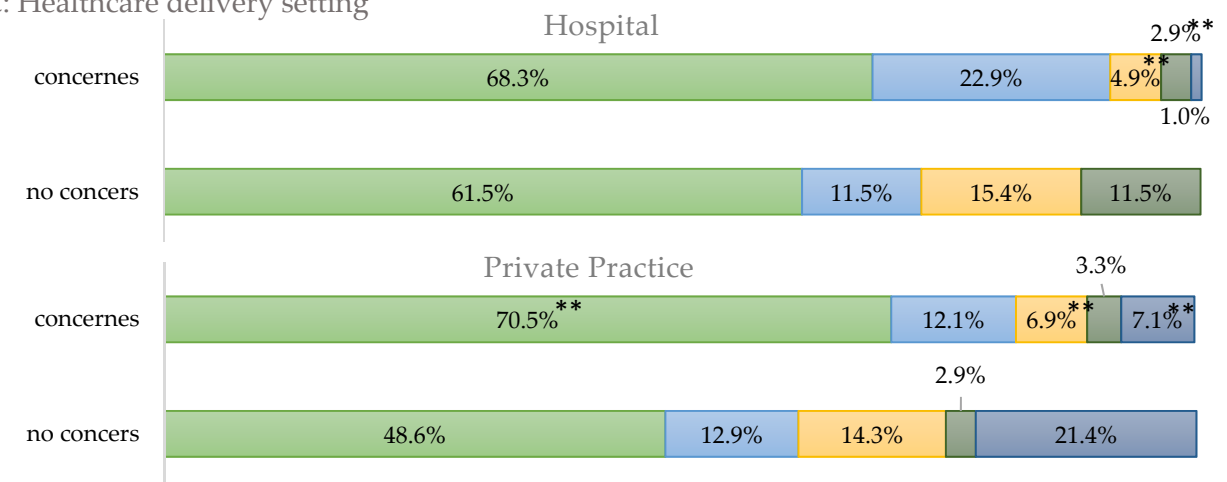


Figure S1: Vaccination rate depending on perceived risk of SARS-CoV-2 infection compared with the general population: (a) vaccination rate by professional group; (b) Vaccination rate by medical specialty; (c) Vaccination rate by health care delivery setting.

GIE: gastrointestinal endoscopy; **other aggregated aerosol-generating specialties such as otolaryngology, oral- and maxillofacial surgery and dental medicine.**

\*\* Significance level  $p < 0.01$ ; \* Significance level  $p < 0.05$