Level: Hospital

Topics:
- Training and coaching of health workers

Contact details:
Maria Carola Martino
Azienda Ospedaliera Universitaria Pisana
rischio.clinico@ao-pisa.toscana.it

With this training initiative, the Teaching Hospital of Pisa aims at giving an answer both to the training needs of its health workers and to the training needs of newly hired workers. Indeed, newly hired workers found themselves starting their job under a very high emotional and psychological stress, with considerable workloads and having to adhere to working behaviour and procedures born as a result of Covid outbreak management.

The focus of this training is how to donning/doffing PPE and the perception of risk of health workers linked to this procedure.

In one month 2000 operators have been trained including newly hired workers. Training sessions have been organized at the beginning and end of shifts.

Trainers group was composed by the clinical risk manager of the hospital, one representative of the Prevention and Protection Service (RSPP), a clinician and some specialists from the Hygiene and Epidemiology Unit.

Several simulations sessions have been carried out in order to increase awareness on the importance of a correct performance of the several and complex steps for donning/doffing PPE.

During the simulations health workers were asked to donning/doffing PPE wearing gloves covered by with black ink in order to highlight any critical issues in the application of the procedure and consequent possible contagions. The new hires workers were supported by critical care experts.

The hospital also purchased 12 mirrors and installed them at the entry and exit points of the dressing areas. Mirrors helped health workers to observe each other during these manoeuvres and to keep high the attention and the risk awareness on the possibility of contagion if the procedure is not performed correctly. In these areas visual alerts showing the sequential steps of the procedure were also posted.

To complete the training, video tutorials were made for the donning/doffing PPE procedure with gowns and protecting suit, accessible from the intranet and YouTube.
Fig 1. Donning/doffing PPE procedure with gowns and protecting suit
Scheda per la rappresentazione dell’esperienza

**Level**: Region

**Topics**:  
- PPEs management  
- Training and coaching of health workers

**Contact details**:  
Centro Gestione Rischio Clinico e Sicurezza del Paziente Regione Toscana  
Rischio.clinico@regione.toscana.it

**Cognitive support tools for front-line operators in the COVID19 emergency**

The health emergency caused by COVID19 has questioned most of the operating methods of our hospitals, work flows, clinical-care pathways, relationships among operators and between operators and patients. Many of these organizational issues can be read and interpreted through the lens of human factors, ergonomics and safety culture.

The Centre for Clinical Risk Management and Patient Safety (Centre GRC) and the network of risk managers of the Tuscany Region therefore tried to give concrete answers to the rapid transformation that many of the care services had to undergo and to the consequent request for sudden adaptation of the working methods of operators to the new organizational structures.

The Tuscan clinical risk network, in its role of support for the design of clinical care processes for the improvement of quality and safety, well aware that the safety of care passes from the safety of operators, has worked to minimize the risks for professionals and for patients and increase safety levels.

To this end, the Centre GRC has developed a series of operational tools to support cognitive overload resulting from the emergency that aim at facilitating front-line operators. Any content of the tool was defined according to indications coming from national (Istituto Superiore di Sanità) and international (WHO, ECDC) institutions.

Following human factors and ergonomics principles, several posters were created with an easy-to-read graphics and for an immediate visualization of the following concepts:

- Rules of conduct for protection and prevention (Annex 1)  
- General rules of conduct to be applied in all clinical-care settings (Annex 2)  
- How to communicate with suspected COVID-19 patients (Annex 3)  
- The 5 moments for hand hygiene (Annex 4)  
- Use of PPE in transport operations with motor vehicles or stretchers on internal routes, first aid activities, COVID hospitalization activities, activities in COVID ICU and activities carried out at the patient’s home ”(Annex 5)
Coronavirus COVID-19

Per gli operatori delle strutture sanitarie
Regole di comportamento per la protezione e prevenzione

Segui le istruzioni fornite dalla tua Azienda e confrontati con i colleghi rispetto alle procedure di sicurezza adottate per proteggerti dal COVID-19.

Quando entri in una stanza in cui si trova un caso sospetto o confermato di COVID-19, devi indossare i DPI come da indicazione della tua Azienda.

Se esegui una procedura respiratoria, come l’intubazione, usa un DPI respiratorio adeguato.

Non toccarti gli occhi, il naso o la bocca con guanti o mani nude fino a che non ti sei lavato le mani accuratamente.

Se ti viene tosse, raffreddore o febbre dopo che hai fornito assistenza, informa immediatamente del tuo stato di salute la tua Direzione e segui le indicazioni che ti forniranno.

I 5 momenti per la corretta igiene delle mani
Usa il gel alcolico o usa acqua e sapone:
1. Prima di toccare un paziente
2. Prima di iniziare procedure pulite/asettiche
3. Dopo il rischio di esposizione a fluidi corporei
4. Dopo aver toccato un paziente
5. Dopo aver toccato le superfici intorno al paziente.

Ricorda
I dispositivi di protezione individuale (DPI) monouso devono essere cambiati tra un uso e l’altro e ogni volta che si assiste un paziente sospetto gettandoli in un bidone con coperchio. Subito dopo lavati accuratamente le mani.

Ricorda
Non toccarti gli occhi, il naso o la bocca con guanti o mani nude fino a che non ti sei lavato le mani accuratamente.
Regole di comportamento generali da applicare in tutti i setting clinico-assistenziali

Coronavirus COVID-19

PER GLI OPERATORI DELLE STRUTTURE SANITARIE

Ridurre possibilmente il numero di accompagnatori e visitatori (non più di uno per paziente)

Far osservare a tutti coloro che accedono alle strutture sanitarie le seguenti precauzioni generali di igiene, a prescindere dalla presenza di sintomi:

- lavarsi le mani con gel alcolico per 30 secondi se le mani non sono visibilmente sporche, e con acqua e sapone per 1 minuto se sono visibilmente sporche;

- utilizzare fazzoletto di carta da gettare immediatamente nel cestino dopo aver starnutito o tossito e lavarsi le mani, oppure utilizzare il gomito flesso;

- evitare di toccarsi occhi, naso e bocca con le mani

Assicurarsi che i locali dove stazionano i pazienti (sale d'attesa, ambulatori, e reparti) siano ben areati e che siano dotati di contenitori per i rifiuti

Limitare il più possibile il movimento dei pazienti con sintomatologia simil influenzale all’interno della struttura per ridurre il rischio potenziale di infezione

Assicurarsi che siano attuate regolarmente le procedure di pulizia e disinfezione degli ambienti

I pazienti che non rientrano nei casi sospetti ma che manifestano febbre, tosse o altri sintomi respiratori, che accedono al Pronto Soccorso, ai reparti e alle attività ambulatoriali, devono:

- lavarsi le mani all’arrivo e dopo aver tossito o starnutito;
- indossare la mascherina;
- stare a distanza di almeno 1 metro dagli altri;
- mantenere l’ambiente possibilmente ventilato
Come comunicare con i pazienti COVID-19 sospetti

PER GLI OPERATORI DELLE STRUTTURE SANITARIE

• Ricorda che i pazienti sospetti e i visitatori che li accompagnano possono essere stressati o impauriti

• Ascolta attentamente le domande e i dubbi dei pazienti: questa è la cosa più importante

• Rispondi a tutte le domande che ti pongono e fornisci correttamente informazioni su COVID-19 anche con l’aiuto dei colleghi

• Ricorda che potresti non avere una risposta per tutte le domande: molto è ancora sconosciuto su COVID-19 ed è giusto ammetterlo onestamente

• Condividi opuscoli o materiali informativi con i tuoi pazienti

• Puoi toccare e confortare i pazienti sospetti indossando le dotazioni di protezione personale

• Spiega la procedura in essere nella struttura sanitaria per la gestione del COVID-19, come l’isolamento o il numero limitato di visitatori e i prossimi passi previsti dal percorso clinico assistenziale

• Permetti a un familiare o un tutore di accompagnare il paziente se è un bambino. All’accompagnatore dovrebbe essere fornita la dotazione di protezione personale da indossare

• Fornisci aggiornamenti ai visitatori e ai familiari quando possibile
I 5 momenti per l’igiene delle mani

Usa il gel alcolico o lavati le mani con acqua e sapone

1. Prima di toccare un paziente
2. Prima di iniziare una procedura sterile
3. Dopo il rischio di contatto con fluidi corporei
4. Dopo aver toccato il paziente
5. Dopo aver toccato le superfici intorno al paziente
## OPERAZIONI DI TRASPORTO CON AUTOVEICOLI O BARELLA PERCORSI INTERNI

### Regole minime di comportamento per la protezione e prevenzione 1/2

<table>
<thead>
<tr>
<th>CONTESTO DI LAVORO</th>
<th>DESTINATARI</th>
<th>ATTIVITÀ</th>
<th>TIPOLOGIA DI DPI O MISURE DI PROTEZIONE</th>
</tr>
</thead>
</table>
| **Ambulanza o mezzi di trasporto** | **Operatori sanitari** | Trasporto sospetto COVID-19 o caso COVID-19 alla struttura sanitaria di riferimento/trasporto interno all’ospedale | - Mascherina chirurgica / Maschera FFP2 se rischio aumentato per intensità e durata o autambulanza con rianimatore  
- Camice monouso idrorepellente  
- Guanti  
- Occhiali di protezione/ Occhiale a mascherina/ Visiera |
| | **Addetti alla guida** | Solo guida del mezzo con sospetto o confermato caso COVID-19 a bordo e separazione del posto di guida da quello del paziente senza circuiti di ricircolo dell’aria tra i due compartimenti del mezzo | - Mantenere la distanza di almeno 1 metro  
- Non sono necessari DPI |
| | | Assistenza nelle fasi di carico e scarico del paziente sospetto o confermato caso COVID-19 | - Mascherina chirurgica  
- Camice monouso idrorepellente  
- Guanti  
- Occhiali di protezione/ Occhiale a mascherina/ Visiera |
| | | Nessun contatto diretto con paziente sospetto COVID-19 ma senza separazione del posto di guida da quello del paziente | Mascherina chirurgica |
| **Paziente con sospetta infezione da COVID-19** | | Trasporto alla struttura sanitaria di riferimento | Mascherina chirurgica |
## OPERAZIONI DI TRASPORTO CON AUTOVEICOLI O BARELLA PERCORSI INTERNI

### Regole minime di comportamento per la protezione e prevenzione 2/2

### CONTESTO DI LAVORO

<table>
<thead>
<tr>
<th>Ambulanza o mezzi di trasporto, trasporto interno con barella</th>
<th>DESTINATARI</th>
<th>ATTIVITÀ</th>
<th>TIPOLOGIA DI DPI O MISURE DI PROTEZIONE</th>
</tr>
</thead>
</table>
| Addetti alle pulizie | Pulizie dopo e durante il trasporto dei pazienti con sospetta infezione da COVID-19 alla struttura sanitaria di riferimento (Alla fine del trasporto del paziente, nel caso in cui sia possibile areare il mezzo, mascherina chirurgica) | - Mascherina chirurgica  
- Camice monouso idrorepellente  
- Guanti spessi  
- Occhiali di protezione (se presenza rischio schizzi di materiale organico o sostanze chimiche)  
- Stivali o scarpe da lavoro chiuse |

| Trasporto interno dei pazienti /Altre aree di transito (ad esempio reparti, corridoi) | Tutti gli operatori inclusi gli operatori sanitari | Nessuna attività che comporti contatto con pazienti COVID-19 | - Non sono necessari DPI  
- Indossare mascherina chirurgica e guanti monouso solo in caso di trasporti prolungati (tempo superiore a 15’)|
### ATTIVITÀ DI PRONTO SOCCORSO

#### Regole minime di comportamento per la protezione e prevenzione 1/2

<table>
<thead>
<tr>
<th>CONTESTO DI LAVORO</th>
<th>DESTINATARI</th>
<th>ATTIVITÀ</th>
<th>TIPOLOGIA DI DPI O MISURE DI PROTEZIONE</th>
</tr>
</thead>
</table>
| **Triage** (in ambito ospedaliero per accettazione utenti) | Operatori sanitari (Si raccomanda riduzione al minimo del numero di esposti; formazione e addestramento specifici) | Screening preliminare che non comporta il contatto diretto | - Vetrata / Interfono / citofono.  
- In alternativa mantenere una distanza dal paziente di almeno 1 metro se possibile o indossare mascherina chirurgica |
| | | Screening con contatto diretto paziente COVID 19 positivo o sospetto | - Mascherina chirurgica  
- Camice monouso idrorepellente  
- Guanti monouso  
- Occhiali di protezione/ Occhiale a mascherina/ Visiera |
| | Pazienti con sintomi respiratori | | - Mantenere una distanza dall’operatore di almeno 1 metro (in assenza di vetrata e interfono)  
- Mascherina chirurgica se tollerata dal paziente  
- Isolamento in stanza singola con porta chiusa e adeguata ventilazione se possibile / Alternativamente, collocazione in area separata sempre a distanza di almeno 1 metro da terzi |
| | Pazienti senza sintomi respiratori | | - Non sono necessari DPI  
- Mantenere una distanza dagli altri pazienti di almeno 1 metro |
### Contesto di lavoro

<table>
<thead>
<tr>
<th>Operatori sanitari (Si raccomanda riduzione al minimo del numero di esposti; formazione e addestramento specifici)</th>
<th>Assistenza diretta a pazienti COVID-19</th>
<th>Procedure che generano aerosol in pazienti COVID-19</th>
<th>Esecuzione tampone oro e rinofaringeo</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mascherina chirurgica o Maschera FFP2/FFP3 in specifici contesti assistenziali¹</td>
<td>- Mascherina chirurgica o Maschera FFP2/FFP3 in specifici contesti assistenziali¹</td>
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<tr>
<td>- Camice monouso idrorepellente</td>
<td>- Camice monouso idrorepellente</td>
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<tr>
<td>- Guanti</td>
<td>- Guanti</td>
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<tr>
<td>- Occhiali di protezione/Occhiale a mascherina/Visiera</td>
<td>- Occhiali di protezione/Occhiale a mascherina/Visiera</td>
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</tr>
</tbody>
</table>

¹ In contesti assistenziali ove vengono concentrati numerosi pazienti COVID-19, se sottoposti a CPAP/NIV, è necessario il ricorso a FFP2. Anche laddove non sia praticata CPAP/NIV è comunque preferibile, ove disponibili, il ricorso a filtranti facciali in base a una appropriata valutazione del rischio che tenga conto anche del significativo incremento del tempo di esposizione, effettuata a livello della struttura dal datore di lavoro con la collaborazione del responsabile del servizio di prevenzione e protezione e del medico competente.

### Accesso in stanze dei pazienti COVID-19

<table>
<thead>
<tr>
<th>Addetti alle pulizie (Si raccomanda riduzione al minimo del numero di addetti esposti; formazione e addestramento specifici)</th>
<th>Accesso in stanze dei pazienti COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mascherina chirurgica</td>
<td>- Mascherina chirurgica</td>
</tr>
<tr>
<td>- Camice monouso idrorepellente</td>
<td>- Camice monouso idrorepellente</td>
</tr>
<tr>
<td>- Guanti spessi</td>
<td>- Guanti spessi</td>
</tr>
<tr>
<td>- Occhiali di protezione (se presenza rischio schizzi di materiale organico o sostanze chimiche)</td>
<td>- Occhiali di protezione (se presenza rischio schizzi di materiale organico o sostanze chimiche)</td>
</tr>
<tr>
<td>- Stivali o scarpe da lavoro chiuse</td>
<td>- Stivali o scarpe da lavoro chiuse</td>
</tr>
</tbody>
</table>
ATTIVITÀ DI DEGENZA E DI T.I. COVID
Regole minime di comportamento per la protezione e prevenzione

**CONTESTO DI LAVORO**

**DESTINATARI**

**ATTIVITÀ**

**TIPOLOGIA DI DPI O MISURE DI PROTEZIONE**

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**Operatori sanitari**
(Si raccomanda riduzione al minimo del numero di esposti; formazione e addestramento specifici)

- Assistenza diretta a pazienti COVID-19
- Procedure che generano aerosol in pazienti COVID-19
- Esecuzione tampone oro e rinofaringeo

**Mascherina chirurgica o Maschera FFP2/FFP3 in specifici contesti assistenziali**
- Camice monouso idrorepellente
- Guanti
- Occhiali di protezione/Occhiale a mascherina/Visiera

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**Addetti alle pulizie**
(Si raccomanda riduzione al minimo del numero di addetti esposti; formazione e addestramento specifici)

- Accesso in stanze dei pazienti COVID-19

**Mascherina chirurgica**
- Camice monouso idrorepellente
- Guanti spessi
- Occhiali di protezione (se presenza rischio schizzi di materiale organico o sostanze chimiche)
- Stivali o scarpe da lavoro chiuse

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**Pazienti**

- Mascherina chirurgica quando possibile
## Regole minime di comportamento per la protezione e prevenzione 1/2

### Contesto di lavoro

<table>
<thead>
<tr>
<th>Destinatari</th>
<th>Attività</th>
<th>TipoLOGIA di DPI o misure di protezione</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operatori sanitari</td>
<td>Esame obiettivo di pazienti con sintomi respiratori</td>
<td>- Mascherina chirurgica o Maschera FFP2/FFP3 in specifici contesti assistenziali¹</td>
</tr>
<tr>
<td></td>
<td>Esame obiettivo di pazienti senza sintomi respiratori</td>
<td>- Camice monouso idrorepellente</td>
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<tr>
<td></td>
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<td>- Guanti</td>
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<tr>
<td></td>
<td></td>
<td>- Occhiali di protezione/ Occhiale a mascherina/ Visiera</td>
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<tr>
<td></td>
<td></td>
<td>- I DPI previsti per l’ordinario svolgimento della propria mansione con maggiore rischio</td>
</tr>
</tbody>
</table>

¹ Nella regione Toscana, è stato preso in considerazione il ricorso a FFP2, in base a una appropriata valutazione del rischio che tenga anche conto del significativo incremento del tempo di esposizione, effettuata a livello della struttura dal datore di lavoro con la collaborazione del responsabile del servizio di prevenzione e protezione e del medico competente.

<table>
<thead>
<tr>
<th>Pazienti con sintomi respiratori</th>
<th>Mascherina chirurgica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pazienti senza sintomi respiratori</td>
<td>Non sono necessari DPI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Addetti alle pulizie</th>
<th>Dopo l’attività di visita di pazienti con sintomi respiratori areare gli ambienti dopo l’uscita del paziente e prima di un nuovo ingresso</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Mascherina chirurgica</td>
</tr>
<tr>
<td></td>
<td>- Camice monouso idrorepellente</td>
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<td></td>
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<tr>
<td></td>
<td>- Stivali o scarpe da lavoro chiuse</td>
</tr>
</tbody>
</table>
**ATTIVITÀ DI AMBULATORI OSPEDALIERI E DEL TERRITORIO COVID-19**

Regole minime di comportamento per la protezione e prevenzione 2/2

<table>
<thead>
<tr>
<th>CONTESTO DI LAVORO</th>
<th>DESTINATARI</th>
<th>ATTIVITÀ</th>
<th>TIPOLOGIA DI DPI O MISURE DI PROTEZIONE</th>
</tr>
</thead>
</table>
| **Sale d’attesa** | **Pazienti con sintomi respiratori** | | - Mascherina chirurgica se tollerata  
- Isolare immediatamente il paziente in area dedicata o comunque separata dagli altri / se tale soluzione non è adottabile assicurare la distanza di almeno 1 metro dagli altri pazienti |
| **Pazienti senza sintomi respiratori** | | - Non sono necessari DPI  
- Mantenere una distanza di almeno 1 metro |
| **Accettazione utenti** | **Operatori sanitari** | **Screening preliminare senza contatto diretto**<sup>1</sup> | - Non sono necessari DPI  
- Mantenere una distanza di almeno 1 metro altrimenti mascherina chirurgica |
| | **Pazienti con sintomi respiratori** | | - Mascherina chirurgica se tollerata  
- Mantenere una distanza di almeno 1 metro |
| | **Pazienti senza sintomi respiratori** | | - Non sono necessari DPI |
| | **Accompagnatori** | **Accesso in stanza del paziente senza prestare cure o assistenza diretta** | - Mascherina chirurgica |

<sup>1</sup> Questa categoria include l’utilizzo di termometri senza contatto, termocamere e la limitazione del tempo di osservazione e di domande, il tutto mantenendo una distanza spaziale di almeno 1 metro
### CONTESTO DI LAVORO

<table>
<thead>
<tr>
<th>DESTINATARI</th>
<th>ATTIVITÀ</th>
<th>TIPOLOGIA DI DPI O MISURE DI PROTEZIONE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domicilio del paziente</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Operatori sanitari** | Assistenza diretta a pazienti COVID-19 | - Mascherina chirurgica  
- Camice idrorepellente  
- Guanti  
- Occhiali di protezione/Occhiale a mascherina/Visiera  
- Maschera FFP2/FFP3  
- Camice idrorepellente  
- Guanti  
- Sovrascarpe  
- Cuffia  
- Occhiali di protezione/Occhiale a mascherina/Visiera |
| | Procedure che generano aerosol in pazienti COVID-19 | - Mascherina chirurgica  
- Camice idrorepellente  
- Guanti  
- Sovrascarpe  
- Cuffia  
- Occhiali di protezione/Occhiale a mascherina/Visiera  
- Mascherina chirurgica  
- Camice idrorepellente  
- Guanti  
- Sovrascarpe  
- Cuffia  
- Occhiali di protezione/Occhiale a mascherina/Visiera |
| | Esecuzione tampone oro e rinofaringeo | - Mascherina chirurgica  
- Camice idrorepellente  
- Guanti  
- Sovrascarpe  
- Cuffia  
- Occhiali di protezione/Occhiale a mascherina/Visiera  
- Mascherina chirurgica  
- Camice idrorepellente  
- Guanti  
- Sovrascarpe  
- Cuffia  
- Occhiali di protezione/Occhiale a mascherina/Visiera |
| **Familiare Caregiver** | Accesso in stanze dei pazienti COVID-19 | - Mascherina chirurgica  
- Camice idrorepellente  
- Guanti  
- Occhiali di protezione (se presenza rischio schizzi di materiale organico o sostanze chimiche)  
- Stivali o scarpe chiuse |
| **Paziente** | Attività di vita quotidiana in isolamento domiciliare | Mascherina chirurgica se tollerata dal paziente |
LEVEL: Hospital

TOPIC: PPE MANAGEMENT

CONTACT DETAILS: Dott.ssa Alessandra De Palma – alessandra.depalma@aosp.bo.it – 051/2144564

Descrizione dell’esperienza di risposta all’emergenza covid-19 che si intende condividere

Initiatives to support healthcare workers involved in managing the emergency

Thanks to the citizens, associations, foundations and companies, crowdfunding campaigns have been launched to support the public healthcare system of Bologna. Solidarity from public and private entities achieved important goals such as helping the Policlinico di Sant’Orsola to purchase equipment, medical devices and PPE, and contributing to the delivery of essential services to frontline personnel involved in the fight against the novel Coronavirus.

Thanks to the donations received, the S. Orsola Foundation and the Policlinico provided practical help to support frontline workers in daily life management.

First of all, to support those workers who needed babysitting services in order to be able to keep going to work, a web platform was created through which one could request expense
reimbursement (it could be also retroactive starting from the day the schools closed) or a vouchers to have a babysitting service – free of charge- from professionals accredited by the platform. **Vouchers for employees looking for household management services** were also made available and the chance to start a collaboration with an accredited housekeeper provided.

Also, with the aim of helping concretely our staff, a **grocery shopping service** was set up: the items to purchase can be selected through a dedicated portal and picked up before leaving the shift inside the Policlinico or home delivery can be requested. In order to get around the tight working rhythms staff is working under in recent weeks, a mobile phone number was made available, so that services can be used by texting via Whatsapp.

Gradually, more and more services were added to the grocery shopping service: **laundry, tailoring services, plumber, electician, parcel pick-up and delivery, postal payments**. Furthermore, given the evolution of epidemiological situation and considering the provision of normal and overtime work by healthcare workers, the Policlinico allowed parking in the organization parking area to owners of annual public transport pass (who are usually not given this possibility). Healthcare workers can, therefore, park in the Policlinico parking areas - employees and non-employees areas - and in the internal areas of the Policlinico (parking areas for employees and other areas, excluding those reserved to people with reduced mobility / H).

Moreover, the Bologna Municipality allowed free parking for healthcare workers (dispaying a special card) in the areas surrounding the Policlinico, so as to facilitate mobility of workers.

Furthermore, for newly hired workers or for workers who do not want or cannot go back home because of the high risk of contagion, the S. Orsola Foundation offers free accommodation for at least one month, hotels or accommodation facilities. Free accommodation is also available for those who are positive to Covid-19 but are not in a position to spend the household-isolatiion period at home.

*It is also worth mentioning the different initiatives aimed at personnel health and wellbeing:*

**TOGETHER FOR THOSE WHO ARE POSITIVE**

The Sant’Orsola Foundation provides free accommodation with tv, wifi, kitchenette and daily grocery delivery for healthcare workers who are found positive to Covid-19 but cannot spend their household isolation period at home. Both for them and for those who are spendind their isolation period at home, quick response service is provided to meet all needs one might have, from psychological support to grocery shopping, from small errands to connecting with family members stuck elsewhere.

**PSYCHOLOGICAL SUPPORT**

Consultations to support healthcare workers involved in managing the emergency to support in case of situations of psychological distress, with the aim of preventing stress-related diseases. Psychological support provided thanks to collaboration with psychologists from the Psychology Unit of the Local Health Authority of Bologna, specifically trained in emergency psychology, to
reduce the stress experienced by healthcare workers, to prevent its accumulation and chronicization. The service is accessible by phone or by going to dedicated office.

**CLINICS DEDICATED TO PREVENTION AND SURVEILLANCE OF THE SPREAD OF CORONAVIRUS AMONG HEALTHCARE WORKERS**

The inter-organization Unit of Occupational Medicine has activated two outpatient clinics dedicated to informing staff and reporting any possible contact with confirmed Covid-19 positive which took place on the workplace or elsewhere. When a contact with a confirmed Covid-19 positive is reported, the Unit of Occupational Medicine reaches the worker to concretely assess the risk of exposure. In case the contact is considered “effective”, the inter-organizational Unit of Occupational medicine provides for “active surveillance2 to be activated as laid down in specific procedures.

**5 MINUTES FOR DRIVE THROUGH TESTING**

Drive through testing is being carried out since april 1st to healthcare workers of the Policlinico going back to work after testing positive for Covid-19. Swab test is carried out in a safe and fast way to people on board of their car by rofessionals from the Occupational medicine unit of the Policlinico. Healthcare workers are convened via e-mail and instructions are provided on how to reach the drive through testing site. It is mandatory not to get out of the car during the test. Access is not permitted without the e-mail with the appointment.

**RESULT OF THE SIEROLOGICAL TEST AND ELECTRONIC MEDICAL RECORD**

Controls on healthcare workers began on April 4th based on the surveillance program developed by the Emilia-Romagna Region “Instructions on the surveillance of health and social care workers and exposure risk management”. Results of the sierological test are included in the electronic medical record, activated to all healthcare workers of the Regional healthcare system. Results are promptly made available on the electronic medical record activated to all healthcare workers of the Regional healthcare system who did not have it before the emergency, in order to ensure healthcare workers and patients’ safety.

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La gestione del neonato con sospetta o confermata infezione da COVID-19

I neonati con infezione da Covid-19 sono per lo più asintomatici o manifestano una sintomatologia raramente severa, caratterizzata da instabilità termica, sintomi respiratori (polipnea, dispnea, apnea, tosse), difficoltà alimentari, letargia e sintomi gastrointestinali (diarrea, vomito e distensione addominale). Il tempo massimo di incubazione fino ad ora descritto è di 14 giorni. Rispetto all’infezione da COVID-19 un neonato può essere nelle seguenti possibili condizioni, che
richiedono l’identificazione di differenti percorsi di gestione, da adattare alle possibilità logistiche dei diversi centri:

- Neonato con sospetta infezione da COVID-19, sintomatico o asintomatico
- Neonato con accertata infezione da COVID-19, sintomatico o asintomatico
- Neonato in cui l’infezione da COVID-19 è esclusa o guarita

Neonati con queste caratteristiche possono giungere all’attenzione della neonatologia dell’AOU Policlinico di S.Orsola attraverso i seguenti percorsi:

1) Neonati figli di madre con sospetta o accertata infezione da COVID-19
2) Neonati con criteri di sospetto o con diagnosi già accertata da COVID-19 giunti in PS Pediatrico da casa o trasferiti da altri presidi ospedalieri
3) Neonati trasportati da altri ospedali mediante attivazione del sistema di trasporto neonatale (STEN)
4) Neonati nati da madre COVID-19 positiva instabile o in assistenza respiratoria presso reparto COVID-19 e non trasferibile.

Per ognuno di questi scenari è opportuno identificare percorsi che consentano la corretta gestione clinica e la minimizzazione del rischio di trasmissione del virus dalla madre al neonato e dal neonato ad altri pazienti o operatori sanitari.

È stata a tale scopo elaborata un’istruzione operativa che descrive la corretta modalità di gestione di questi quattro differenti scenari.

L’istruzione operativa descrive anche le modalità di attivazione del Neonatologo reperibile e le modalità di gestione dell’allattamento nelle differenti situazioni. Il Neonatologo sarà attivato per la gestione iniziale degli scenari 2 (quando concordato con MdG del PS Pediatrico), 3 e 4. Nel caso dello scenario 1 il Neonatologo reperibile verrà attivato in caso di instabilità del neonato con infezione COVID-19 accertata o sospetta. In tutti i casi il Neonatologo Reperibile resterà operativo almeno fino alla stabilizzazione del bambino in TIN.

Riferimento e-mail e telefonico di contatto

Dott.ssa Alessandra De Palma – alessandra.depalma@aosp.bo.it – 051/2144564
LEVEL: Hospital

TOPIC: Information and training of healthcare workers

CONTACT DETAILS: Dott.ssa Alessandra De Palma – alessandra.depalma@aosp.bo.it – 051/2144564

**Descrizione dell’esperienza di risposta all’emergenza covid-19 che si intende condividere**

**Information and training of healthcare workers about the correct use of Personal Protective Equipment (PPE)**

Guidelines concerning correct use of PPE issued by the Ministry of Health and the Region have been promptly implemented by the organization. These guidelines call for a strict compliance to standard preventive measures in assisting all patients and adopting contact and droplet precautions in case of suspect or confirmed COVID-19 infection, in addition to the precautions to be taken to avoid risk of airborne transmission in case of aerosol generating procedures.

The guidelines were in turn forwarded to all healthcare workers through the intra-organization communication tool (“information for all”, that is to say via e-mail to all healthcare workers). They are formally sent to nurse coordinators and Unit Managers/Directors through the organization document management system, and published in a dedicated section of the intranet portal, accessible to all healthcare workers.
The widespread dissemination of the mentioned information is, of course, supported by the daily “technical” implementation followed by analysis of related difficulties (equipment/procurement, applicability, training, etc) through the widest possible sharing within the inter-organization task force between the University-Teaching Hospital and the Local Health Authority of Bologna (Direzione strategica aziendale e Direzione delle UO/Strutture/Servizi di supporto con un ruolo cardine nella gestione dell’emergenza), and within the many briefings taking place daily in the different clinical settings, as well as by making available, in the dedicated intranet section, audiovisual media (video tutorial on how to manage 2nd and 3rd level dressing and undressing).

Here follow some link regarding PPE management:
Online training courses have also been made available:

- "INDICAZIONI PER LA PREVENZIONE DELLA TRASMISSIONE COVID - 19"
- "CORONAVIRUS" - Corso disponibile sulla piattaforma della FNMOCeO (Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri). Il corso affronta la storia dell'epidemia fin dalla segnalazione dei primi casi e fornisce informazioni evidence-based sull'epidemiologia e la clinica, sui possibili scenari futuri e sulla valutazione del rischio.
MANAGEMENT OF INFANTS WITH SUSPECTED OR CONFIRMED COVID-19 INFECTION- Guidance

Infants with Covid-19 infection are mostly asymptomatic or suffer only mild symptoms, including mild fever, respiratory symptoms (polypnoea, dispnea, apnea, cough) eating difficulties, lethargy, and gastrointestinal symptoms (diarrhea, vomiting and abdominal distension). The incubation period described so far is 14 days.

With regards to Covid-19 infection in newborn babies, the following conditions can occur, which require the identification of different management paths, to be adapted based on the logistics of the diverse centers:

- Infant with suspected Covid-19 infection, symptomatic or asymptomatic
- Infant with confirmed Covid-19 infection, symptomatic or asymptomatic
- Infant for whom covid infection is excluded or healed

Babies with the mentioned conditions may arrive at the neonatology of the University Teaching Hospital Sant’Orsola through the following paths:

1) Infants born to a mother with suspected or confirmed Covid-19 infection
2) Infants suspected or confirmed positive to Covid-19 admitted to the Pediatric Emergengy Room from home or transferred from other healthcare facilities
3) Infants transferred from other hospitals by activating the neonatal emergency transport system (NETS)
4) Infants born to a Covid-19 positive mother with unstable conditions or in respiratory assistance and not transferable

For each of the above scenarios, the appropriate pathways need to be identified so as to facilitate correct management and minimize the risk of mother-to-child transmission and transmission from the newborn to other patients or healthcare workers.

SCENARIO N.1 - INFANTS BORN TO A MOTHER WITH SUSPECTED OR CONFIRMED COVID-19 INFECTION

As of date, vertical transmission of COVID-19 infections appears unlikely, but peripartum transmission through contact with maternal secretions cannot be excluded and is a cause of concern. This is the reason why the CDC (Interim Considerations for Infection Prevention and
Control of Coronavirus Disease 2019 -COVID-19 -18.02.2020-in Inpatient Obstetric Healthcare) suggests a prudent management of the mother-infant couple and sometimes recommending temporary separation of a mother with known (Patient Under Investigation- PUI) or suspected COVID-19 and her infant to reduce risk of transmission to infant. Therefore, until neonatal infection is excluded, the newborn should be considered as PUI and managed with the necessary precautions.

The pregnant woman to be tested for suspected COVID-19 infection is identified if the following conditions are present:

1. Pregnant woman with acute respiratory infection (sudden onset of one of the following symptoms: fever, cough, shortness of breath) with no other etiology that fully explains the clinical presentation
2. Pregnant woman with residence in a location reporting high community transmission
3. Pregnant woman who has had close contact with a suspected or confirmed COVID-19 case in the 14 days before the symptoms onset.

In the mentioned cases, the swab test will be carried out as soon as possible (surgery, delivery room, during hospitalization), according to the following procedures:

- Phone contact with the infectious disease specialist to confirm the swab test is to be carried out
- Contact with the Hospital Higiene Service coordinator to organize swab testing

Undertaking mother-infant separation in case of suspected or known COVID-19 infection depends on logistic conditions, and on clinical and infectious state of the mother and the newborn. Separation must be discussed with family members and, in specific cases, a joint evaluation from the hygienist and the infectious disease specialist might be carried out. The newborn management should preferably take place in a negative-pressure room where access is allowed to a healthy caregiver (with appropriate PPE- surgical mask, disposable gown and gloves as laid down in the organization document titled “Guidance for management of patient with suspected or confirmed COVID-19”)

The S.Orsola Policlinico has a negative-pressure room located at the Neonatal intensive care unit on the 2nd floor, equipped with a dressing/undressing area and PPE as laid down in the mentioned document. One complete intensive care station can be placed in this room (with the possibility to place a second one in case of emergency). The room has negative pressure and air filtration system. A second isolation room not equipped for intensive care with no air filtration system nor may be set up in case of extreme need, where the newborn should be assisted by a healthy caregiver. Furthermore, given the current epidemiology, in accordance with the colleagues from the Pediatrics department, the newborn can be admitted to the pediatric Covid-19 department.

In case mother-child separation is not undertaken, rooming-in practice is followed and breastfeeding is preferred, measures aimed at preventing airborne transmission should be implemented such as: avoid kissing the baby, protecting from cough and respiratory secretions (using face mask during feedings and intimate contact with the baby), hand washing at every contact, allowing no visits.
If the rooming-in practice is followed, the baby will be put to sleep in his cradle at a distance of at least 2 meters from the mother. The baby can be taken care by the father (if asymptomatic) with surgical mask, disposable gown, gloves and adequate hand hygiene, as laid down by the organization Guidance. Details about management of infants born to a mother with suspected or confirmed Covid-19 infection are in Table 1.

NEWBORN CARE AT BIRTH

Preferably a neonatologist should be present in the delivery room in case of birth considered at risk (confirmed or suspected COVID-19 mother).

• In case of infant born to a mother with suspected or known COVID-19 infection, baby should be taken care of in the delivery room dedicated to infected women by a neonatologist and an midwife both equipped with appropriate PPE- FFP2/FFP3 face mask, long-sleeved water-repellent disposable gown, face shield.

• In case of C-section, it will be performed in urgency C-room equipped with dressing/undressing with appropriate PPE and the newborn will be taken care of in a close room, with the same dressing/undressing area with PPE as the operating room. Midwife and neonatologist wear the same PPE as per the spontaneous childbirth. Delayed clamping of the umbilical cord will not be performed.

Patient allocation and transfer will be decided once first care is provided to the newborn, depending on the clinical and infectious conditions of mother and child (see table 1). Possible scenarios regarding infants with suspected/confirmed COVID-19 infection are reported in Table 1.

SCENARIO N. 2- INFANTS SUSPECTED OR CONFIRMED POSITIVE TO COVID-19 ADMITTED TO THE PEDIATRIC EMERGENCY ROOM

Infants admitted to the pediatric ER because of suspected COVID-19 infection are initially assessed by the ER doctor following the appropriate procedure. In case the child considered at risk presents symptoms, he will be transferred to the neonatal ICU. If clinically stable, the pediatric ER doctor and the available neonatologist will agree on the best mode of transfer. If not clinically stable, the newborn is stabilized by the pediatric anesthesiologist and then moved to the NICU. Here, a doctor and a nurse with appropriate PPE – FFP2/FFP3 face mask, water-repellent long sleeved disposable gown, face shield, will made the swab test following the appropriate procedures.

In case the infant shows no symptoms or mild symptoms (transfer to NICU is not required), he will be admitted in neonatology.

MANAGEMENT OF HOSPITALIZED INFANTS (see table 3):

The asymptomatic parent can take care of the newborn in the hospitalization wards, in accordance with the rules of the different wards, with appropriate PPE- surgical mask, disposable gowns and gloves, as laid down in the organization document titled “Guidance for suspected or known COVID-19 patient”. Considering the need to perform manoeuvres at risk of transmission (airway aspiration, non-invasive ventilation, etc), special caution is recommended to healthcare workers while managing infants with acute respiratory symptoms (fever, dyspnoea, cough, etc.).
As set out by Guidance issued at national level (circolare ministeriale “Richiamo in ordine a indicazioni fornite con la circolare del 22 febbraio 2020”), “healthcare workers must wear appropriate PPE in case of contact with suspected or known COVID-19 case”.

Specifically, while waiting for testing results, healthcare workers should wear:

- Surgical mask, disposable gown and gloves when carrying out ordinary manoeuvres (meal and oral therapies administration, diaper change, etc.)
- FFP2/FFP3 facemask, long sleeved water repellent disposable gown, gloves and face shield in case of aerosol generating procedures.

Details on management of the hospitalized patients are reported in Table 3.

**SCENARIO 3 - INFANTS TRANSFERRED FROM OTHER HOSPITALS BY ACTIVATING THE NEONATAL EMERGENCY TRANSPORT SYSTEM (NETS)**

When NETS is required for a newborn with suspected or confirmed COVID-19 infection, transport should be carried out by the neonatologist and the NETS nurse, observing some particular precautions:

- The neonatologist or the nurse asking for the NETS to be activated should specify the request is for a newborn with suspected or confirmed COVID-19 infection.
- The NETS team wears PPE (FFP2/FFP3 face mask, long sleeved water repellent disposable gown, gloves, face shield) throughout the transport and removes it once they are back to the COVID-19 NICU area after assisting the newborn.
- The ambulance must be equipped with alcohol-based handrub gel dispenser readily available
- At the end of the transport, the ambulance containing all the used devices must be disinfected before going back to the department.

**SCENARIO N.4 - INFANTS BORN TO A COVID-19 POSITIVE MOTHER WITH UNSTABLE CONDITIONS OR IN RESPIRATORY ASSISTANCE AND NOT TRANSFERABLE**

COVID-19 pregnant women needing breathing support are concentrated in the COVID department of the S. Orsola Hospital. If childbirth is likely to occur in a department other from Obstetrics, the (available) neonatologist will reach the department bringing the necessary equipment for neonatal resuscitation and will take care of the newborn wearing PPE as described in scenario n.1.

When a pregnant woman in gestational age compatible with the survival of the newborn (≥ 23 weeks) is admitted to the COVID-19 department, a NICU station will be brought to the department if not already available.

**ACTIVATION OF AVAILABLE NEONATOLOGIST**

The Neonatologist will be activated for the initial management of scenarios number 2 (in accordance with the Doctor on-call of the Pediatric ED), 3 and 4. As per scenario number 1, the Neonatologist will be activated in case the baby with suspected or confirmed Covid-19 infection is
unstable. Whatever the case, the neonatologist remains on duty until the baby is stabilized in the neonatal intensive care unit.

BREASTFEEDING

Based on the current scientific knowledge, and considering the insignificant role of breastmilk in the transmission of other respiratory viruses, transmission via breastfeeding of COVID-19 infection is unlikely. However, breastfeeding should be carried out applying all necessary precautions, to avoid airborne transmission or transmission by contact with respiratory secretions of infected patients. For this reason, decision about breastfeeding should be carefully considered and agreed with the family, and clinical conditions of the mother and the newborn should be taken into account as well as epidemiological and organizational conditions in which the case is handled.

In case the positive mother has symptoms (with fever, cough and respiratory secretions), and temporary mother-child separation is undertaken, even though breastfeeding is not contraindicated, logistical and organizational difficulties may arise, which do not allow use of expressed breastmilk. Considering the mother’s clinical conditions, it would be recommended to express breast milk in order to facilitate milk production so as to foster breastfeeding once the clinical, epidemiological and organizational conditions makes it possible. Meanwhile, use of donated milk – if available and if deemed beneficial for the baby – and milk substitutes may be considered.

When use of breastmilk is preferred, all the recommended steps to prevent mother-to-child transmission should be taken: using a curtain, surgical face mask when breastfeeding or in direct contact with the baby, accurate hand washing, placing beby cradle at 2 metres distance from the mother’s head, banning visits from family and friends. When using expressed breast milk, it should be expressed through a manual or electric breast pump. The mother should make should to wash her hands before touching the bottle or any other element of the breast pump and implement the recommendations for an appropriate pump washing. Pasteurization is not necessary.
<table>
<thead>
<tr>
<th>CASE</th>
<th>CLINICAL CONDITIONS MOTHER</th>
<th>COVID-19 TEST MOTHER</th>
<th>CLINICAL CONDITIONS NEWBORN</th>
<th>COVID-19 TEST NEWBORN</th>
<th>NEWBORN MANAGEMENT</th>
<th>PPE FOR ALL HC WORKERS INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Symptomatic (fever, cough, dyspnea)</td>
<td>Positive</td>
<td>Not relevant</td>
<td>To be tested ALWAYS*</td>
<td>To be placed in a negative-pressure room in NICU to be tested for COVID-19</td>
<td>If positive, he/she is hospitalized (hospitalization criteria are in Table 3 case 8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For newborn transfer modes, see legend § case b</td>
<td>If negative, he/she is hospitalized in NICU, Neonatology or pediatric COVID department, depending on whether he/she is symptomatic or not</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For COVID-19 discharge criteria of a negative infant born to a positive mother, see legend §.</td>
<td>For COVID-19 discharge criteria of a negative infant born to a positive mother, see legend §.</td>
</tr>
<tr>
<td>2</td>
<td>Asymptomatic</td>
<td>Positive</td>
<td>Asymptomatic</td>
<td>To be tested ALWAYS*</td>
<td>While waiting for the test results, the newborn stays in the same room as the mother following distancing measures^ (legend^) taken care of by a healthy caregiver of hc worers</td>
<td>If positive, he/she is hospitalized (hospitalization criteria are in Table 3 case 8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For COVID-19 discharge criteria of a negative infant born to a positive mother, see legend §.</td>
<td>If negative, upon request, roaming in practice is followed according to distancing measures^; or the newborn may be admitted to neonatology unit</td>
</tr>
<tr>
<td>Case</td>
<td>Mother's Symptoms</td>
<td>Newborn's Status</td>
<td>Action</td>
<td>Unit Admission</td>
<td>Note</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
<td>------------------</td>
<td>--------</td>
<td>----------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Asymptomatic</td>
<td>Positive</td>
<td>Symptomatic</td>
<td>To be placed in a negative-pressure room in NICU to be tested for COVID-19</td>
<td>Admission to NICU/neonatology unit to be tested for Covid-19 and be appropriately assisted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To be tested ALWAYS*</td>
<td>For newborn transfer modes, see legend §</td>
<td>During all ateps: from childbirth to negative COVID results:</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Symptomatic or Asymptomatic</td>
<td>Pending</td>
<td>Asymptomatic</td>
<td>To be tested based on the results of the mother’s test</td>
<td>During all ateps: from childbirth to negative COVID results:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>While waiting for the (mother’s or newborn’s) test results, the newborn stays in the same room as the mother following distancing measures^ (legend^) taken care of by a healthy caregiver of h/c workers</td>
<td>Same PPE as case 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 2: INFANT BORN TO A MOTHER WITH SYMPTOMS, SUSPECTED OR CONFIRMED COVID-19 HOSPITALIZED IN A DEP. OTHER OBSTETRICS
<table>
<thead>
<tr>
<th>CASE</th>
<th>CLINICAL CONDITIONS MOTHER</th>
<th>COVID-19 TEST MOTHER</th>
<th>CLINICAL CONDITIONS NEWBORN</th>
<th>COVID-19 TEST NEWBORN</th>
<th>NEWBORN MANAGEMENT</th>
<th>PPE FOR ALL HC WORKERS INVOLVED</th>
</tr>
</thead>
</table>
| 5    | Symptomatic unstable      | Positive or pending  | Aysmptomatic/symptomatic    | To be tested based on the results of the mother’s test | To be placed in a negative-pressure room in NICU to be tested for COVID-19  
For newborn transfer modes, see legend $ | If positive, he/she is hospitalized (hospitalization criteria are in Table 3 case 8)  
If negative, he/she is hospitalized in NICU, During all steps: from childbirth to negative COVID results: FFP2/FFP3 face |
<p>| case b | Neonatology or pediatric COVID department, depending on whether he/she is symptomatic or not. For COVID-19 discharge criteria of a negative infant born to a positive mother, see legend §. | mask, Long-sleeved water-repellent disposable gown, Gloves, Face shield |</p>
<table>
<thead>
<tr>
<th>CASE</th>
<th>CLINICAL CONDITIONS MOTHER</th>
<th>COVID-19 TEST MOTHER</th>
<th>NEWBORN MANAGEMENT</th>
<th>PPE FOR ALL HC WORKERS INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Symptomatic/mild symptoms</td>
<td>Pending*</td>
<td>Hospitalized in NEONATOLOGY or Pediatric COVID department</td>
<td>- <strong>Ordinary manoeuvres</strong> (meal and oral therapies administration, diaper change, etc.): Surgical mask, disposable gown and gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- <strong>Aerosol generating procedures</strong>: FFP2/FFP3 facemask, long sleeved water repellent disposable gown, gloves and face shield</td>
</tr>
<tr>
<td>7</td>
<td>Severe symptoms</td>
<td>Pending*</td>
<td>Hospitalized in NICU in negative pressure room</td>
<td>- <strong>Ordinary manoeuvres</strong> (meal and oral therapies administration, diaper change, etc.): Surgical mask,</td>
</tr>
</tbody>
</table>

**TABLE 3: MANAGEMENT OF HOSPITALIZED INFANT**
newborn must be tested (or repeated) preferably within 24 hours of age. Results to be received within 24 hours

### Tables 1, 2, 3: LEGEND

**newborn transfer modes:**

- **Case a:** newborn is transferred from the delivery room to the same room as the mother. In case a temporary adaptation is needed, this will occur in a close room. Care will be provided by the healthcare workers deemed suitable for the case (es. pediatrics resident)

- **Case b:** newborn with suspected of confirmed COVID-19 infection is transferred from the delivery room or other department to the NICU or other department in a neonatal incubator by healthcare workers protected with appropriate PPE.

### Distancing measures to be adopted in Rooming in:

| **8** | Not relevant | POSITIVE | COVID-19 positive infant should be admitted to NICU (negative pressure room); if asymptomatic, the newborn may be isolated in Neonatology or in the Pediatric COVID-19 department, based on the needs due to the current epidemiological situation
For newborn transfer mode, see legend $ |
|---|---|---|---|
| **9** | Worsening clinical situation, transfer to another department needed | POSITIVE or pending | The newborn already admitted to Neonatology/Pediatric COVID Department with Suspected COVID-19 infection is moved in NICU (negative pressure room) and is tested as soon as possible
For newborn transfer mode, see legend $ |
| | | | FFP2/FFP3 face mask, Long-sleeved water-repellent disposable gown, gloves and face shield
For parents’ visits, see legend % |

**Tables 1, 2, 3: LEGEND**

- Aerosol generating procedures:
  - FFP2/FFP3 facemask, long sleeved water repellent disposable gown, gloves and face shield
- Distancing measures to be adopted in Rooming in:
When joint management of the mother-child couple and breastfeeding are possible, all the recommended steps to prevent the potential spread of the virus need to be taken, such as: avoid kissing the baby, protecting the newborn from cough and respiratory secretions (mask while breastfeeding and in case of mother-child contact), hand washing before breastfeeding and ban family visits. If rooming-in is applicable, the cradle will be placed at a 2-metres distance from the mother. The asymptomatic father can take care of the child with appropriate PPE- surgical mask, disposable gown, gloves- and after adequate hand washing.

§ Discharge of the asymptomatic newborn tested negative born to an asymptomatic or with mild symptoms mother tested positive:

Early discharge even at 48 hours after birth may be necessary in case the hospital is overloaded. However a monitoring of at least one week is recommended, with COVID test repeated at discharge.

In some cases, newborn tested negative may be discharged at 48 hours of age and isolated at home assisted by an asymptomatic family member: in this case, the phone number of the NICU will be reported in the discharge letter, and notification will be given to the local hygiene service and to the pediatrician. Pediatric check-ups will be scheduled at 7, 14 and 28 days of age at the Pediatric COVID department, where swab test will be repeated, as laid down in the Guidance of the Italian Society of Neonatology.

Further check-ups will not be necessary if tested negative at 28 days of age

% Family visits to positive newborn

Parents can visit the newborn paying special attention to hand hygiene and wearing appropriate PPE considering the patient’s clinical condition (minimum PPE required: surgical mask, disposable gown and gloves)
LEVEL: Hospital

TOPIC: Organizational solutions for COVID patients’ management

CONTACT DETAILS: Dott.ssa Alessandra De Palma – alessandra.depalma@aosp.bo.it – 051/2144564

Descrizione dell’esperienza di risposta all’emergenza covid -19 che si intende condividere

Management of the newborn babies with suspected or confirmed Covid-19 infection

Infants with Covid-19 infection are mostly asymptomatic or suffer only mild symptoms, including mild fever, respiratory symptoms (polypnoea, dispnea, apnea, cough) eating difficulties, lethargy, and gastrointestinal symptoms (diarrhea, vomiting and abdominal distension). The incubation period described so far is 14 days.

With regards to Covid-19 infection in newborn babies, the following conditions can occur, which require the identification of different management paths, to be adapted based on the logistics of the diverse centers:

- Infant with suspected Covid-19 infection, symptomatic or asymptomatic
- Infant with confirmed Covid-19 infection, symptomatic or asymptomatic
- Infant for whom covid infection is excluded or healed

Babies with the mentioned conditions may arrive at the neonatology of the University Teaching Hospital Sant’Orsola through the following paths:

1) Infants born to a mother with suspected or confirmed Covid-19 infection
2) Infants suspected or confirmed positive to Covid-19 admitted to the Pediatric Emergency Department from home or transferred from other healthcare facilities
3) Infants transferred from other hospitals by activating the neonatal transport system
4) Infants born to a Covid-19 positive mother with unstable conditions or in respiratory assistance and not transferable

For each of the above scenarios, the appropriate pathways need to be identified so as to facilitate correct management and minimize the risk of mother-to-child transmission and transmission from the newborn to other patients or healthcare workers.
MANAGEMENT OF INFANTS WITH SUSPECTED OR CONFIRMED COVID-19 INFECTION- Guidance

Infants with Covid-19 infection are mostly asymptomatic or suffer only mild symptoms, including mild fever, respiratory symptoms (polypnoea, dispnea, apnea, cough) eating difficulties, lethargy, and gastrointestinal symptoms (diarrhea, vomiting and abdominal distension). The incubation period described so far is 14 days.

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1) Infants born to a mother with suspected or confirmed Covid-19 infection
2) Infants suspected or confirmed positive to Covid-19 admitted to the Pediatric Emergencgy Room from home or transferred from other healthcare facilities
3) Infants transferred from other hospitals by activating the neonatal emergency transport system (NETS)
4) Infants born to a Covid-19 positive mother with unstable conditions or in respiratory assistance and not transferable

For each of the above scenarios, the appropriate pathways need to be identified so as to facilitate correct management and minimize the risk of mother-to-child transmission and transmission from the newborn to other patients or healthcare workers.

SCENARIO N.1 - INFANTS BORN TO A MOTHER WITH SUSPECTED OR CONFIRMED COVID-19 INFECTION

As of date, vertical transmission of COVID-19 infections appears unlikely, but peripartum transmission through contact with maternal secretions cannot be excluded and is a cause of concern. This is the reason why the CDC (Interim Considerations for Infection Prevention and
Control of Coronavirus Disease 2019 - COVID-19 - 18.02.2020 in Inpatient Obstetric Healthcare) suggests a prudent management of the mother-infant couple and sometimes recommending temporary separation of a mother with known (Patient Under Investigation- PUI) or suspected COVID-19 and her infant to reduce risk of transmission to infant. Therefore, until neonatal infection is excluded, the newborn should be considered as PUI and managed with the necessary precautions.

The pregnant woman to be tested for suspected COVID-19 infection is identified if the following conditions are present:

1. Pregnant woman with acute respiratory infection (sudden onset of one of the following symptoms: fever, cough, shortness of breath) with no other etiology that fully explains the clinical presentation
2. Pregnant woman with residence in a location reporting high community transmission
3. Pregnant woman who has had close contact with a suspected or confirmed COVID-19 case in the 14 days before the symptoms onset.

In the mentioned cases, the swab test will be carried out as soon as possible (surgery, delivery room, during hospitalization), according to the following procedures:

- Phone contact with the infectious disease specialist to confirm the swab test is to be carried out
- Contact with the Hospital Higiene Service coordinator to organize swab testing

Undertaking mother-infant separation in case of suspected or known COVID-19 infection depends on logistic conditions, and on clinical and infectious state of the mother and the newborn. Separation must be discussed with family members and, in specific cases, a joint evaluation from the hygienist and the infectious disease specialist might be carried out. The newborn management should preferably take place in a negative-pressure room where access is allowed to on healthy caregiver (with appropriate PPE - surgical mask, disposable gown and gloves as laid down in the organization document titled “Guidance for management of patient with suspected or confirmed COVID-19”)

The S.Orsola Policlinico has a negative-pressure room located at the Neonatal intensive care unit on the 2nd floor, equipped with a dressing/undressing area and PPE as laid down in the mentioned document. One complete intensive care station can be placed in this room (with the possibility to place a second one in case of emergency). The room has negative pressure and air filtration system. A second isolation room not equipped for intensive care without air filtration system nor may be set up in case of extreme need, where the newborn should be assisted by a healthy caregiver. Furthermore, given the current epidemiology, in accordance with the colleagues from the Pediatrics department, the newborn can be admitted to the pediatric Covid-19 department.

In case mother-child separation is not undertaken, rooming-in practice is followed and breastfeeding is preferred, measures aimed at preventing airborne transmission should be implemented such as: avoid kissing the baby, protecting from cough and respiratory secretions (using face mask during feedings and intimate contact with the baby), hand washing at every contact, allowing no visits.
If the rooming-in practice is followed, the baby will be put to sleep in his cradle at a distance of at least 2 meters from the mother. The baby can be taken care by the father (if asymptomatic) with surgical mask, disposable gown, gloves and adequate hand hygiene, as laid down by the organization Guidance. Details about management of infants born to a mother with suspected or confirmed Covid-19 infection are in Table 1.

NEWBORN CARE AT BIRTH

Preferably a neonatologist should be present in the delivery room in case of birth considered at risk (confirmed or suspected COVID-19 mother).

- In case of infant born to a mother with suspected or known COVID-19 infection, baby should be taken care of in the delivery room dedicated to infected women by a neonatologist and an midwife both equipped with appropriate PPE- FFP2/FFP3 face mask, long-sleeved water-repellent disposable gown, face shield.
- In case of C-section, it will be performed in urgency C-room equipped with dressing/undressing with appropriate PPE and the newborn will be taken care of in a close room, with the same dressing/undressing area with PPE as the operating room. Midwife and neonatologist wear the same PPE as per the spontaneous childbirth. Delayed clamping of the umbilical cord will not be performed.

Patient allocation and transfer will be decided once first care is provided to the newborn, depending on the clinical and infectious conditions of mother and child (see table 1). Possible scenarios regarding infants with suspected/confirmed COVID-19 infection are reported in Table 1.

SCENARIO N. 2- INFANTS SUSPECTED OR CONFIRMED POSITIVE TO COVID-19 ADMITTED TO THE PEDIATRIC EMERGENCY ROOM

Infants admitted to the pediatric ER because of suspected COVID-19 infection are initially assessed by the ER doctor following the appropriate procedure. In case the child considered at risk presents symptoms, he will be transferred to the neonatal ICU. If clinically stable, the pediatric ER doctor and the available neonatologist will agree on the best mode of transfer. If not clinically stable, the newborn is stabilized by the pediatric anesthesiologist and then moved to the NICU. Here, a doctor and a nurse with appropriate PPE – FFP2/FFP3 face mask, water-repellent long sleeved disposable gown, face shield, will made the swab test following the appropriate procedures.

In case the infant shows no symptoms or mild symptoms (transfer to NICU is not required), he will be admitted in neonatology.

MANAGEMENT OF HOSPITALIZED INFANTS (see table 3):

The asymptomatic parent can take care of the newborn in the hospitalization wards, in accordance with the rules of the different wards, with appropriate PPE- surgical mask, disposable gowns and gloves, as laid down in the organization document titled “Guidance for suspected or known COVID-19 patient”. Considering the need to perform manoeuvres at risk of transmission (airway aspiration, non-invasive ventilation, etc), special caution is recommended to healthcare workers while managing infants with acute respiratory symptoms (fever, dyspnoea, cough, etc.).
As set out by Guidance issued at national level (circolare ministeriale “Richiamo in ordine a indicazioni fornite con la circolare del 22 febbraio 2020”), “healthcare workers must wear appropriate PPE in case of contact with suspected of known COVID-19 case”.

Specifically, while waiting for testing results, healthcare workers should wear:

- Surgical mask, disposable gown and gloves when carrying out ordinary manoeuvres (meal and oral therapies administration, diaper change, etc.)
- FFP2/FFP3 facemask, long sleeved water repellent disposable gown, gloves and face shield in case of aerosol generating procedures.

Details on management of the hospitalized patients are reported in Table 3.

SCENARIO 3 - INFANTS TRANSFERRED FROM OTHER HOSPITALS BY ACTIVATING THE NEONATAL EMERGENCY TRANSPORT SYSTEM (NETS)

When NETS is required for a newborn with suspected or confirmed COVID-19 infection, transport should be carried out by the neonatologist and the NETS nurse, observing some particular precautions:

- The neonatologist or the nurse asking for the NETS to be activated should specify the request is for a newborn with suspected or confirmed COVID-19 infection.
- The NETS team wears PPE (FFP2/FFP3 face mask, long sleeved water repellent disposable gown, gloves, face shield) throughout the transport and removes it once they are back to the COVID-19 NICU area after assisting the newborn.
- The ambulance must be equipped with alcohol-based handrub gel dispenser readily available
- At the end of the transport, the ambulance containing all the used devices must be disinfected before going back to the department.

SCENARIO N.4 - INFANTS BORN TO A COVID-19 POSITIVE MOTHER WITH UNSTABLE CONDITIONS OR IN RESPIRATORY ASSISTANCE AND NOT TRANSFERABLE

COVID-19 pregnant women needing breathing support are concentrated in the COVID department of the S. Orsola Hospital. If childbirth is likely to occur in a department other from Obstetrics, the (available) neonatologist will reach the department bringing the necessary equipment for neonatal resuscitation and will take care of the newborn wearing PPE as described in scenario n.1

When a pregnant woman in gestational age compatible with the survival of the newborn (≥ 23 weeks) is admitted to the COVID-19 department, a NICU station will be brought to the department if not already available.

ACTIVATION OF AVAILABLE NEONATOLOGIST

The Neonatologist will be activated for the initial management of scenarios number 2 (in accordance with the Doctor on-call of the Pediatric ED), 3 and 4. As per scenario number 1, the Neonatologist will be activated in case the baby with suspected or confirmed Covid-19 infection is
unstable. Whatever the case, the neonatologist remains on duty until the baby is stabilized in the neonatal intensive care unit.

BREASTFEEDING

Based on the current scientific knowledge, and considering the insignificant role of breastmilk in the transmission of other respiratory viruses, transmission via breastfeeding of COVID-19 infection is unlikely. However, breastfeeding should be carried out applying all necessary precautions, to avoid airborne transmission or transmission by contact with respiratory secretions of infected patients. For this reason, decision about breastfeeding should be carefully considered and agreed with the family, and clinical conditions of the mother and the newborn should be taken into account as well as epidemiological and organizational conditions in which the case is handled.

In case the positive mother has symptoms (with fever, cough and respiratory secretions), and temporary mother-child separation is undertaken, even though breastfeeding is not contraindicated, logistical and organizational difficulties may arise, which do not allow use of expressed breastmilk. Considering the mother’s clinical conditions, it would be recommended to express breast milk in order to facilitate milk production so as to foster breastfeeding once the clinical, epidemiological and organizational conditions makes it possible. Meanwhile, use of donated milk – if available and if deemed beneficial for the baby – and milk substitutes may be considered.

When use of breastmilk is preferred, all the recommended steps to prevent mother-to-child transmission should be taken: using a curtain, surgical face mask when breastfeeding or in direct contact with the baby, accurate hand washing, placing baby cradle at 2 metres distance from the mother’s head, banning visits from family and friends. When using expressed breast milk, it should be expressed through a manual or electric breast pump. The mother should make should to wash her hands before touching the bottle or any other element of the breast pump and implement the recommendations for an appropriate pump washing. Pasteurization is not necessary.
<table>
<thead>
<tr>
<th>CASE</th>
<th>CLINICAL CONDITIONS MOTHER</th>
<th>COVID-19 TEST MOTHER</th>
<th>CLINICAL CONDITIONS NEWBORN</th>
<th>COVID-19 TEST NEWBORN</th>
<th>NEWBORN MANAGEMENT</th>
<th>PPE FOR ALL HC WORKERS INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Symptomatic (fever, cough, dyspnea)</td>
<td>Positive</td>
<td>Not relevant</td>
<td>To be tested ALWAYS*</td>
<td>To be placed in a negative-pressure room in NICU to be tested for COVID-19 if positive, he/she is hospitalized (hospitalization criteria are in Table 3 case 8)</td>
<td>If positive, he/she is hospitalized in NICU, Neonatology or pediatric COVID department, depending on whether he/she is symptomatic or not</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For COVID-19 discharge criteria of a negative infant born to a positive mother, see legend §.</td>
</tr>
<tr>
<td>2</td>
<td>Asymptomatic</td>
<td>Positive</td>
<td>Asymptomatic</td>
<td>To be tested ALWAYS*</td>
<td>While waiting for the test results, the newborn stays in the same room as the mother following distancing measures^ (legend^) taken care of by a healthy caregiver of hc worers</td>
<td>If positive, he/she is hospitalized in NICU, Neonatology or pediatric COVID department, depending on whether he/she is symptomatic or not</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For COVID-19 discharge criteria of a negative infant born to a positive mother, see legend §.</td>
</tr>
</tbody>
</table>

^ Legend for distancing measures: 
- ** distancing measure:** 
- ** distancing measure:** 

§ Legend for COVID-19 discharge criteria: 
- ** discharge criteria:** 

* Always use PPE for all HC workers involved.
<table>
<thead>
<tr>
<th>Case</th>
<th>Mother's Symptom Status</th>
<th>Newborn's Symptom Status</th>
<th>Action for Newborn</th>
<th>Action for Mother</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Asymptomatic</td>
<td>Positive</td>
<td>Symptomatic</td>
<td>To be placed in a negative-pressure room in NICU to be tested for COVID-19</td>
<td>Admission to NICU/neonatology unit to be tested for Covid-19 and be appropriately assisted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>During all ateps: from childbirth to negative COVID results: Same PPE as case 1</td>
</tr>
<tr>
<td>4</td>
<td>Symptomatic or Asymptomatic</td>
<td>Pending</td>
<td>Asymptomatic</td>
<td>While waiting for the (mother’s or newborn’s) test results, the newborn stays in the same room as the mother following distancing measures (legend) taken care of by a healthy caregiver of hc worers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>During all ateps: from childbirth to negative COVID results: Same PPE as case 1</td>
</tr>
</tbody>
</table>

**TABLE 2: INFANT BORN TO A MOTHER WITH SYMPTOMS, SUSPECTED OR CONFIRMED COVID-19 HOSPITALIZED IN A DEP. OTHER OBSTETRICS**
<table>
<thead>
<tr>
<th>CASE</th>
<th>CLINICAL CONDITIONS MOTHER</th>
<th>COVID-19 TEST MOTHER</th>
<th>CLINICAL CONDITIONS NEWBORN</th>
<th>COVID-19 TEST NEWBORN</th>
<th>NEWBORN MANAGEMENT</th>
<th>PPE FOR ALL HC WORKERS INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Symptomatic unstable</td>
<td>Positive or pending</td>
<td>Asymptomatic/symptomatic</td>
<td>To be tested based on the results of the mother’s test</td>
<td>To be placed in a negative-pressure room in NICU to be tested for COVID-19 For newborn transfer modes, see legend §</td>
<td>If positive, he/she is hospitalized (hospitalization criteria are in Table 3 case 8) If negative, he/she is hospitalized in NICU, During all steps: from childbirth to negative COVID results: FFP2/FFP3 face</td>
</tr>
</tbody>
</table>
case b

Neonatology or pediatric COVID department, depending on whether he/she is symptomatic or not.

For COVID-19 discharge criteria of a negative infant born to a positive mother, see legend §.

- mask,
- Long-sleeved water-repellent disposable gown
- Gloves
- Face shield
<table>
<thead>
<tr>
<th>CASE</th>
<th>CLINICAL CONDITIONS MOTHER</th>
<th>COVID-19 TEST MOTHER</th>
<th>NEWBORN MANAGEMENT</th>
<th>PPE FOR ALL HC WORKERS INVOLVED</th>
</tr>
</thead>
</table>
| 6    | Symptomatic/mild symptoms | Pending*            | Hospitalized in NEONATOLOGY or Pediatric COVID department | - **Ordinary manoeuvres** (meal and oral therapies administration, diaper change, etc.): Surgical mask, disposable gown and gloves  
- **Aerosol generating procedures**: FFP2/FFP3 facemask, long sleeved water repellent disposable gown, gloves and face shield |
| 7    | Severe symptoms           | Pending*            | Hospitalized in NICU in negative pressure room | - **Ordinary manoeuvres** (meal and oral therapies administration, diaper change, etc.): Surgical mask, |

**TABLE 3: MANAGEMENT OF HOSPITALIZED INFANT**


<table>
<thead>
<tr>
<th>#</th>
<th>newborn transfer modes:</th>
<th>For newborn transfer mode, see legend $</th>
<th>For parents’ visits, see legend %</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td><strong>Case a:</strong> newborn is transferred from the delivery room to the same room as the mother. In case a temporary adaptation is needed, this will occur in a close room. Care will be provided by the healthcare workers deemed suitable for the case (e.g. pediatrics resident)</td>
<td>COVID19 positive infant should be admitted to NICU (negative pressure room); if asymptomatic, the newborn may be isolated in Neonatology or in the Pediatric COVID-19 department, based on the needs due to the current epidemiological situation</td>
<td>FFP2/FFP3 face mask, Long-sleeved water-repellent disposable gown, gloves and face shield</td>
</tr>
<tr>
<td></td>
<td><strong>Case b:</strong> newborn with suspected or confirmed COVID-19 infection is transferred from the delivery room or other department to the NICU or other department in a neonatal incubator by healthcare workers protected with appropriate PPE.</td>
<td>The newborn already admitted to Neonatology/Pediatric COVID Department with Suspected COVID-19 infection is moved in NICU (negative pressure room) and is tested as soon as possible</td>
<td>FFP2/FFP3 face mask, Long-sleeved water-repellent disposable gown, gloves and face shield</td>
</tr>
</tbody>
</table>

Tables 1, 2, 3: LEGEND

*newborn must be tested (or repeated) preferably within 24 hours of age. Results to be received within 24 hours

$ newborn transfer modes:

- **Case a:** newborn is transferred from the delivery room to the same room as the mother. In case a temporary adaptation is needed, this will occur in a close room. Care will be provided by the healthcare workers deemed suitable for the case (e.g. pediatrics resident)
- **Case b:** newborn with suspected or confirmed COVID-19 infection is transferred from the delivery room or other department to the NICU or other department in a neonatal incubator by healthcare workers protected with appropriate PPE.

^ Distancing measures to be adopted in Rooming in:
When joint management of the mother-child couple and breastfeeding are possible, all the recommended steps to prevent the potential spread of the virus need to be taken, such as: avoid kissing the baby, protecting the newborn from cough and respiratory secretions (mask while breastfeeding and in case of mother-child contact), hand washing before breastfeeding and ban family visits. If rooming-in is applicable, the cradle will be placed at a 2-metres distance from the mother. The asymptomatic father can take care of the child with appropriate PPE- surgical mask, disposable gown, gloves- and after adequate hand washing.

§ Discharge of the asymptomatic newborn tested negative born to an asymptomatic or with mild symptoms mother tested positive:

Early discharge even at 48 hours after birth may be necessary in case the hospital is overloaded. However a monitoring of at least one week is recommended, with COVID test repeated at discharge.

In some cases, newborn tested negative may be discharged at 48 hours of age and isolated at home assisted by an asymptomatic family member: in this case, the phone number of the NICU will be reported in the discharge letter, and notification will be given to the local hygiene service and to the pediatrician. Pediatric check-ups will be scheduled at 7, 14 and 28 days of age at the Pediatric COVID department, where swab test will be repeated, as laid down in the Guidance of the Italian Society of Neonatology.

Further check-ups will not be necessary if tested negative at 28 days of age

% Family visits to positive newborn

Parents can visit the newborn paying special attention to hand hygiene and wearing appropriate PPE considering the patient’s clinical condition (minimum PPE required: surgical mask, disposable gown and gloves)
Operational instructions were drafted, describing the appropriate ways for managing the mentioned scenarios.

It also describes how to reach the available Neonatologist and how to manage breastfeeding in different situations. The Neonatologist will be activated for the initial management of scenarios number 2 (in accordance with the Doctor on call of the Pediatric ED), 3 and 4. As per scenario number 1, the Neonatologist will be activated in case the baby with suspected or confirmed Covid-19 infection is unstable. Whatever the case, the neonatologist remains on duty until the baby is stabilized in the neonatal intensive care unit.
GUIDANCE ABOUT SURVEILLANCE OF COVID-19 AMONG STAFF OF THE PROVINCIAL HEALTH AUTORITY OF RAGUSA

The document is meant for providing guidance for managing cases where staff (healthcare, professional, technical and administrative staff) with possible Covid-19 contacts. The purpose is to keep delivering the essential services aimed at population care and assistance ensuring the safety of staff in relation to condition of potential and/or possible exposure to Covid-19.

Once a covid-19 infection is ascertained, the hospital management identifies workers who had contact with the Covid-19 case without using PPE. The Medical Prevention department will investigate possible contacts taking place outside the workplace. Once the actual exposure is assessed the list of the healthcare workers for which surveillance is required is sent to the competent physician.

The competent physician contacts the healthcare workers for the anamnestic assessment, which takes place as follows:

- PERSON WITH SYMPTOMS \rightarrow\ swab test is carried out
  - If tested positive, he/she will not be admitted to the workplace, will be isolated for 14 days and self-monitor own conditions
  - If tested negative, he/she will not be admitted to workplace, will be isolated for 14 days and self-monitor own conditions. Re-assessment will be carried out at the resolution of the symptoms with a second swab test

- PERSON WITH NO SYMPTOMS \rightarrow\ swab test is carried out
  - If tested positive, he/she will not be admitted to the workplace, will be isolated and self-monitor own conditions
  - If tested negative, he/she will be admitted to the workplace with PPE and surgical mask, self-monitoring of own conditions.
  - The swab test is repeated every 48 hours until day 14 from the contact with the Covid-19 case. In case of symptoms onset or positive swab test, the worker is suspended from work and isolated for 14 days with active monitoring and possible re-assessment. In case of symptoms onset, procedure for person with symptoms should be followed.

HEALTHCARE WORKERS SURVEILLANCE
The Hospital management should sensitize healthcare workers towards reporting as soon as possible the onset of respiratory symptoms (whether it occurred on the workplace or
not), so that specific provision related to the symptomatic picture and potential/possible exposure.

It is therefore essential that healthcare workers self-monitor their condition and suspend their work in case of respiratory symptoms or if they tested positive.

All healthcare workers who tested positive, must test negative twice in 24 hours in order to be considered recovered.
LEVEL: Hospital

PROCEDURE FOR ADMISSION TO THE EMERGENCY DEPARTMENT

Admission to the emergency department takes place only via the pre-triage tent located at the entrance of the hospital, in front of the camera calda. Inside tent n.1 (Pre-triage) there is a pre-triage nurse, who measures patients’ body temperature and collects patients’ information and phone number, alongside with a nurse assigned to tent n.2, both equipped with PPE.

Patients with mild symptoms, such as cough, fever or non-severe respiratory distress, are given a surgical mask and taken over by the nurse assigned to tent n.2 to be accompanied, without entering the emergency department, to the second tent, located in the area behind the emergency department.

Patients with fever arriving by non-medical ambulance will go directly to tent n.2. Acknowledging that the patient has symptoms, the nurse assigned to tent n.2 will ask:
- If he/she has had contacts with a confirmed Covid-19 case in the last 14 days prior to symptom onset;
- If he/she has been travelling in a location reporting community transmission during the 14 days prior to symptom onset

When one of the above options is confirmed, the nurse informs the emergency room physician, who decides whether the infectious disease specialist needs to intervene. The specialist performs the swab test and decides whether the patient is to be sent to the isolation room while waiting for the results. Blood tests can be carried out by the nurse assigned to tent n.2 if need be.

In case the swab test is:
- NEGATIVE, the patient will be admitted to the ER to continue the procedure or will be discharged at home
- POSITIVE, the infectious disease specialist will decide whether the patient is to be admitted to the infectious disease department or discharged at home.
**Doctors-family communication**

At the University Teaching Hospital Città della Salute e della Scienza in Tourin (Italy), COVID-19 patients who need hospital care are placed in specific areas (COVID department) and cohort isolation is used based on intensity of care.

Given the extremely high contagiousness of the SARS-CoV-2 virus and the consequent need to wear appropriate PPE, for which specific training must be delivered, family members are not allowed to visit patients.

As it is impossible for patients and doctors to meet with the patients’ family members, the hospital management set up a team, composed of physicians and psychologists, to communicate with families.

Direct communication between patients and family is possible by using smartphone or tablet. Thanks to donations, hospital departments were equipped with these devices and healthcare workers were invited to provide support to those who cannot use them on their own. Thus, both verbal and visual communication between patients and their family is preserved, at least for those who are able to communicate, albeit helped.

Communication between doctors and patients’ family members is made more difficult by the PPE professionals must wear, which make it harder to use communication tools rapidly and safely.

Therefore, a communication model including setting up of a team composed of physicians and psychologists was introduced. In the early afternoon, the team receives daily news on patients’ clinical conditions. Information is provided by the attending physicians, who fill in a standardized form including all content to be communicated to the families. The form is designed to be easy-to-use and to fill in. In general, information about hospitalized patients include personal details and summary information about cognition and consciousness, clinical parameters considered in the overall framework, the therapy administered and the clinical activities to be carried out in the days to come.

Lack of contact with the patient and the trusting doctors generates feelings of insecurity giving rise to doubts and fears that can be contained with detailed information so as to allow family members to figure out what is going on during hospitalization.

The forms fill out by the doctors of the COVID department are sent to the communication team in the early afternoon via the organization encrypted email system. The team analyzes and discuss upon the documents received and contacts the family members indicated by the patient.

During the first talk, the team doctor introduces himself/herself and the psychologist, then explains the meaning and the ways of communicating between the hospital and the patients’ families.
Scheda per la rappresentazione dell’esperienza

Level: Hospital

Topic: Organizational solutions for COVID patients’ management

Contact details:
Dott. Giulio Fornero – SC Qualità e Risk Management Accreditamento 
gfornero@cittadellasalute.to.it Tel. 0116335040 Dott.

Umberto Fiandra – SC Qualità e Risk Management Accreditamento 
ufiandra@cittadellasalute.to.it Tel. 0116334337 Dott.

Michele Corezzi – SC Direzione Sanitaria Presidio Molinette 
mcorezzi@cittadellasalute.to.it Tel. 0116336732-3519731358

Dott.ssa Maria Francesca Furmenti – SC Direzione Sanitaria Presidio Molinette 
mfurmenti@cittadellasalute.to.it Tel. 0116336732

Dott.ssa Elena Olivero – SC Direzione Sanitaria Presidio Molinette 
eolivero@cittadellasalute.to.it Tel. 0116335689

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Given the extremely high contagiousness of the SARS-CoV-2 virus and the consequent need to wear appropriate PPE, for which specific training must be delivered, family members are not allowed to visit patients.

As it is impossible for patients and doctors to meet with the patients’ family members, the hospital management set up a team, composed of physicians and psychologists, to communicate with families.

Direct communication between patients and family is possible by using smartphone or tablet. Thanks to donations, hospital departments were equipped with these devices and healthcare workers were invited to provide support to those who cannot use them on their own. Thus, both verbal and visual communication between patients and their family is preserved, at least for those who are able to communicate, albeit helped.

Communication between doctors and patients’ family members is made more difficult by the PPE professionals must wear, which make it harder to use communication tools rapidly and safely. Therefore, a communication model including setting up of a team composed of physicians and psychologists was introduced. In the early afternoon, the team receives daily news on
patients’ clinical conditions. Information is provided by the attending physicians, who fill in a standardized form including all content to be communicated to the families. The form is designed to be easy-to-use and to fill in. In general, information about hospitalized patients include personal details and summary information about cognition and consciousness, clinical parameters considered in the overall framework, the therapy administered and the clinical activities to be carried out in the days to come. Lack of contact with the patient and the treating doctors generates feelings of insecurity giving rise to doubts and fears that can be contained with detailed information so as to allow family members to figure out what is going on during hospitalization. The forms filled out by the doctors of the COVID department are sent to the communication team in the early afternoon via the organization encrypted email system. The team analyzes and discusses upon the documents received and reaches the family members indicated by the patient. During the first talk, the team doctor introduces himself/herself and the psychologist, then explains the meaning and the ways of communicating between the hospital and the patient’s family. In particular, information about the service provided are given, with special regard to psychological support provided. After the introduction, the team provides information about the patient’s clinical conditions, allowing family members to make questions and request clarifications. A summary of the communication is recorded on a specific register, which is essential both to record feedback and questions made by family members and to ensure continuity of communication considering the communication team’s work shifts. Talks are scheduled the same way all days, from Mondays to Sundays. Feedback and specific questions made by family members are sent by email to the treating physicians and doctors and nurses of the COVID department. The communication team, in agreement with the physicians and nurses of the COVID department, takes on responsibility to inform patients about possible bad news, being essential in these circumstances the support from psychologists. The restrictions in place due to COVID-19 epidemic in terms of accessibility to the facility, but also regarding funerals, make it possible that families may no longer see their loved ones, once they are hospitalized. Collaboration with Clinical Psychology department proved to be essential: besides ensuring communication about clinical conditions, the communication team supports family members in facing problems related to isolation and distress. An empathic approach was deemed essential alongside with professional skills, so as to ensure that no one was left alone. Relatives’ requests are often about the patients’ clinical conditions, but they also asked to give small objects to patients, pictures or other “comfort objects”. Sometimes, the communication team took care of the patients, who are themselves in household isolation, providing helpful information about their “new” daily life during the emergency. Psychological support service is provided to patients’ family members upon request, at the end of the daily talks. Good communication reassures family members about the patients’ management, especially in a moment where fear may arise that the healthcare system is not struggle to handle it. Therefore, it
is crucial to communicate to the families that their loved ones are taken care of and receive the assistance they need.
THE “OCCHIOBELLO” PROJECT: FREE ONLINE CHECK-UPS

The “Santa Maria Maddalena” private hospital has set up a remote check up service to meet the needs of those who are forced home by the Covid-19 epidemic. At the moment only delivery of urgent care services is allowed, therefore patients cannot be admitted to the hospital to receive elective care. This has led to discomfort in patients, as they need information, suggestions and guidance. The idea is to provide online check-ups: this is an activity that can result either in a medical report or in exchange of information. The professionals involved are orthopedists, cardiologists, dermatologists, physiatrists, rheumatologists, senologists, and in pain medicine specialists who offered to carry out online check-ups for free in this time of emergency.

It works as follows: the hospital website has a dedicated section called “Medici online”, including the list of all available doctors. Once the patient selects the name of the physician, they fill in a form with their data and the reasons for the online check-up. Once the doctor gets the request, he proposes date and time for an appointment. If the patient is ok with the proposed date and time, they schedule an appointment and connection is made, via laptop or smartphone. The app chosen for the online check-ups is Zoom, which ensures high security of conversation, video and text.

The experience has been started on March 27 2020 and up to now 69 online check-ups and 20 phone calls (for elderly people with no connection).

Further objectives of this project are:

- To keep monitoring already known patients
- To help reduce anxiety and improve quality of life of patients and their family members
- To facilitate communication and patient-doctor interaction and interaction between doctors
- To break down geographical and temporal barriers, so as to overcome the impossibility to deliver healthcare services in other ways
- To reach the widest possible number of people and facilitate exchange of information, checking adherence to therapies (medication therapy or others)

INDICATORS:

1. Dimension indicator: n. of users followed/3 months. Expected value: at least 10% of the users calling for services that cannot be delivered because of the Covid-19 epidemic
2. User satisfaction: qualitative indicator- it refers to commentations and/or thank you notes from users (patients, caregivers)
PREVENTION AND CONTROL OF SARS-COV-2 INFECTION IN LONG-TERM CARE FACILITIES

Most cases of Covid-19 infection were diagnosed in elderly people with multiple pathologies. The elderly population is fragile and needs to be protected howsoever. Therefore, as part of Sars-Cov-2 prevention and control, we need to pay the utmost attention to the older adults.

There are 7 directly-managed long-term care facilities in the territory of the Local Health Authority Umbria 2 with an overall number of 210 beds. Being variable-sized communities, with a minimum of 10 to a maximum of 70 residents, there is the risk of epidemic outbreaks.

In the framework of the COVID-19 sanitary crisis, a detailed analysis of nursing homes situation was deemed essential in order to implement appropriate measures to prevent outbreaks and to plan and manage interventions in emergency situations.

The Clinical Risk management department of the Local Health Authority Umbria 2 has developed the following tools to implement the guidelines included in the Report 4/2020 if the Italian National Institute of Health and the prevention measures for hospitals and healthcare organizations of the Local Health Authority Umbria 2:

- Checklist for Sars-CoV2 infection prevention and control in long-term care facilities
- Screening sheet for visitors

The Checklist for Sars-CoV2 infection prevention and control in long-term care facilities allows the facilities to self-assess their strengths and weaknesses in preparedness to COVID-19 management, so as to improve emergency response. Assessment is to be carried out for 6 general measures and 30 specific measures alongside and level of implementation (fully implemented- partially implemented- not yet implemented) and supporting documents should be reported.

Considering that art.2 par.q of the Decree of the Prime Minister March 9,2020 has banned relatives and acquaintances from accessing care homes, visits can be authorized, in exceptional cases, after appropriate risk-benefit assessment. The Checklist sets out in the specific measure: early identification of suspected COVID-19 infection among visitors, workers and residents by using the Screening sheet for visitors, which allow to immediately identify people with flu-like symptoms (dry cough, widespread muscle pain, headache, runny nose, sore throat, conjunctivitis, diarrhea, vomiting) and/or fever.

The Clinical Risk Management service has distributed the checklist to the 7 facilities to fill in and invited District Managers to disseminate the checklist to accredited facilities and facilities with contractual agreement with the Local Health Authority.
# Checklist for SARS-CoV2 Infection Prevention and Control in Long-Term Care Facilities

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Located in</th>
<th>Facility/Service Manager</th>
<th>Facility/Service Coordinator</th>
<th>Date</th>
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</table>

## Structural and Organizational Aspects

### Activity
- Hospitalization
- Outpatient care
- Home care/community care
- Other ________________________

### Number of Users
- Hospitalization nr. ____
- Outpatient care nr. ____
- Home care/community care nr. ______
- Other ____________________ nr. _________

## Specific Structural Aspects

- Video-door entry system
  - Yes
  - No

- Reception/front office
  - Yes
  - No

## Measures Implemented During COVID-19 Epidemic

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Completed</th>
<th>In Progress</th>
<th>Not Started</th>
<th>Documents</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 There is a specific COVID-19 preparedness plan</td>
<td></td>
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<tr>
<td>1.2 A copy of the COVID-19 preparedness plan is available at the facility and accessible by staff</td>
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<tr>
<td>1.3 A plan is in place for protecting residents,</td>
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</tbody>
</table>
| 1.4 | A person has been assigned responsibility for monitoring HAIs and COVID-19.  
*Insert name, title, and contact information of person responsible* |   |   |   |   |   |   |   |   |
| 1.5 | Standard precautions are applied when taking care of all residents, while specific precautions are applied based on assessment of risk of transmission |   |   |   |   |   |   |   |   |
| 1.6 | Assessment of compliance to hand hygiene practice has been carried out |   |   |   |   |   |   |   |   |

**2. SPECIFIC MEASURES: EARLY IDENTIFICATION OF SUSPECTED COVID-19 CASES AMONG VISITORS, PERSONNEL AND RESIDENTS**

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<tbody>
<tr>
<td>2.1</td>
<td>Visitors restrictions have been implemented (as set out in the Decree of the Prime Minister dated March 9 2020)</td>
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<tr>
<td>2.2</td>
<td>The “screening sheet for visitors” is used in the exceptional cases when visitors are allowed</td>
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<tr>
<td>2.3</td>
<td>There is an “access record”</td>
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<tr>
<td>2.4</td>
<td>The facility has a written protocol to identify, manage and monitor residents, volunteers and healthcare workers with COVID-19 infection (es. weekly or daily reporting about residents and personnel with COVID-19 infection)</td>
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<tr>
<td>2.5</td>
<td>The facility has instructed HC workers to</td>
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regularly monitor themselves for fever and symptoms of respiratory infection and, in case of symptoms onset, to avoid going to work following what the local health authorities for COVID-19 risk assessment laid down

| 2.6 | Provisions were set out which define how to monitor for fever and flu-like symptoms and symptoms of a respiratory infection or shortness of breath and other risk factors (eg. Contact with confirmed COVID cases) in **newly admitted or re-admitted residents** |
| 2.7 | Provisions were set out which define how to monitor for fever and flu-like symptoms and symptoms of a respiratory infection or shortness of breath and other risk factors (eg. Contact with confirmed COVID cases) in **residents** |
| 2.8 | Provisions were set out which define how to immediately inform medical staff about the situation and keep carrying out diagnostic investigations and go on with the resident’s management |
| 2.9 | The facility has a protocol for active monitoring of respiratory infections among residents and healthcare staff |

<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
<th>COMPLETED</th>
<th>IN PROGRESS</th>
<th>NOT STARTED</th>
<th>DOCUMENTS</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>SUPPLIES AND RESOURCES</td>
<td></td>
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<td></td>
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<tr>
<td>3.1</td>
<td>Alcohol-based handrub for hand hygiene is available</td>
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</table>

Alcohol-based handrub for hand hygiene is available
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</thead>
<tbody>
<tr>
<td><strong>3.2</strong></td>
<td>The sinks are stocked with soap and paper towels for hand washing</td>
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<tr>
<td><strong>3.3</strong></td>
<td>Signs are posted indicating appropriate IPC precautions and PPE use</td>
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<tr>
<td><strong>3.4</strong></td>
<td>The facility provides PPE (eg. Gowns, surgical masks, gloves and face shields) to be used when taking care of people with respiratory symptoms</td>
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<tr>
<td><strong>3.5</strong></td>
<td>Trash disposal bins are positioned inside the resident’s room to make it easy for staff to discard PPE after removal</td>
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<tr>
<td><strong>3.6</strong></td>
<td>The facility has a protocol to monitor supply levels (eg. Medical devices and PPE)</td>
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<tr>
<td><strong>3.7</strong></td>
<td>Surgical masks are available for residents</td>
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<tr>
<td><strong>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</strong></td>
<td><strong>COMPLETED</strong></td>
<td><strong>IN PROGRESS</strong></td>
<td><strong>NOT STARTED</strong></td>
<td><strong>DOCUMENTS</strong></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>HEALTHCARE TRAINING TO HELP THEM CORRECTLY ADOPT PRECAUTIONS/ISOLATION MEASURES</td>
<td></td>
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<tr>
<td><strong>4.1</strong></td>
<td>All healthcare workers and cleaners received specific training on basic principles of IPC, with special attention to standard precautions</td>
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<tr>
<td><strong>4.2</strong></td>
<td>Personnel taking care directly of residents and cleaners received specific training on how to avoid spread of SARS-COV-2 infection</td>
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<tr>
<td><strong>4.3</strong></td>
<td>The facility has a plan to record compliance to the recommendations for COVID-19 infection in healthcare workers</td>
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<tr>
<td><strong>4.4</strong></td>
<td>The facility has a plan for expediting the credentialing and training of non-facility/newly hired HC workers in case of staffing crisis</td>
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<tr>
<td>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</td>
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<tr>
<td><strong>5</strong> AWARENESS AND TRAINING OF RESIDENTS AND VISITORS</td>
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</tr>
<tr>
<td><strong>5.1</strong> Plan to increase awareness and train residents and visitors with regards to standard precautions about how to prevent SARS-COV-2 infection has been defined</td>
<td></td>
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<tr>
<td><strong>5.2</strong> Animation and socio-educational activities were organized to convey these messages correctly, organizing small groups and respecting distance of at least one meter between the participants</td>
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<tr>
<td><strong>6</strong> REMINDERS TO PROMOTE APPROPRIATE BEHAVIORS</td>
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</tr>
<tr>
<td><strong>6.1</strong> Visual reminders, such as posters, brochures, screen-savers about COVID-19 were developed about hand hygiene, social distancing and other precautions, as well as the need to monitor own health conditions</td>
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<tr>
<td><strong>7</strong> COMMUNICATION AND OPERATIONAL MANAGEMENT</td>
<td></td>
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</tr>
<tr>
<td><strong>7.1</strong> Key public health points of contact during a COVID-19 outbreak have been identified</td>
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<tr>
<td><strong>7.2</strong> A person has been assigned responsibility for communications with public health authorities during a COVID-19 outbreak</td>
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</tr>
</tbody>
</table>

*Insert name and contact information*
7.3 A person has been assigned responsibility for communications with staff, residents, and their families regarding the status and impact of COVID-19 in the facility.

*Insert name and contact information*

<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
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<th>NOTES</th>
</tr>
</thead>
</table>
7.4 The facility has a process for inter-facility transfers of residents with suspected or confirmed COVID-19 infection

8 POSTMORTEM CARE

8.1 A plan has been developed for postmortem care and disposition of deceased residents

<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
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<th>NOT STARTED</th>
<th>DOCUMENTS</th>
<th>NOTES</th>
</tr>
</thead>
</table>
9 ENVIRONMENTAL SANITATION

9.1 Cleaning plan has been revised/updated with special attention to frequency, use of specific disinfectants, high-touch surfaces, restrooms, shared areas, room ventilation

9.2 Facility ensures HC personnel have access to hospital-grade disinfectants to allow for frequent cleaning of high-touch surfaces and shared resident care equipment.
REFERENCES:

- Rapporto ISS COVID-19 n. 4/2020 INDICAZIONI AD INTERIM PER LA PREVENZIONE E IL CONTROLLO DELL’INFEZIONE DA SARS-COV-2 IN STRUTTURE RESIDENZIALI SOCIOSANITARIE Gruppo di Lavoro ISS Prevenzione e Controllo delle Infezioni, aggiornato al 16 marzo 2020
- Coronavirus Disease 2019 (COVID-19) Preparedness Check list for Nursing Homes and other Long-Term Care Settings CDC www.cdc.gov/COVID19
- USL Umbria 2 MISURE DI PREVENZIONE NEGLI OSPEDALI E NELLE STRUTTURE SANITARIE
Scheda per la rappresentazione dell’esperienza

**Level:** Outpatient care facility

**Topics:**
- Re-organization of clinical care pathways
- Organizational solutions for non-COVID patients management during COVID epidemic

**Contact details:**
Dr. Diego Saccon, Diretore UOC Ser.D.
e-mail: serd@aulss4.ieneto.it, Tel. 0421 227740

Dr.ssa Carolina Preialdi, Responsabile Funzioni Sicurezza del Paziente
e-mail: carolina.preialdi@aulss4.ieneto.it, tel: 3203806195

**Reorganizing the addiction recovery service in the context of the emergency caused by COVID-19 pandemic**

Here follow a description of the reorganization of the addiction recovery service because of the COVID-19 pandemic in order to keep treating 1007 patients.

Starting from February 24, 2020 the following measures have been implemented:
- Reduce the risk of COVID-19 spread among the outpatient offices of the Addiction recovery service and of other activities involving external agencies;
- Advise workers and users to adopt preventive behavior such as social distancing
- Handle less stable cases correctly and safely
- Reduce the possibility of inappropriate ER admission

These measures have been progressively adjusted in the subsequent days based on the COVID situation developments and Ministerial, regional and organization guidance according to the following steps:

- Reorganizing access to the center for medication prescription/administration and for drug and blood testing;
- Reorganizing access to the center medical and psychiatric visits and interviews, psychological and psychosocial assessment
- Strengthening phone support to patients
- Planning prevention activities
- New ways of accessing long-term care facilities
- Managing the activities of the community centers
- Managing the social coaching project
- Managing staff and smart working
- Managing the activities to be carried out on site that cannot be postponed, workers, projects and internships
- Managing suspected cases and contacts
1. REORGANIZING ACCESS TO THE CENTER FOR MEDICATION PRESCRIPTION/ADMINISTRATION AND FOR DRUG AND BLOOD TESTING

Duration of take-home medication was extended to “stable” patients and based on their compliance. Likewise, drug testing is reduced to “stable” patients and based on their compliance. In case of rehab pathways including control supervision from Authorities, we assess every single situation awaiting for further decisions. Alcohol breath test are suspended. Blood tests are suspended.

Management of on-site activities

One healthcare worker (usually a nurse) is assigned the task of managing access to the waiting room. The nurse wears surgical mask and gloves:
- An access number is distributed on arrival: no more than 3 at a time patients are allowed to enter the waiting room
- Health education tips are given about how to prevent spread of infection, based on ministerial and regional recommendations
- Before entering the sickroom or medical offices, patients have their hands sanitized using alcohol-based hand rub
- Patients are advised not to go to the center in case of symptoms onset (fever, cough, breathing difficulties) or if they had contacts with suspected COVID cases, but they can make a phone call
- Patients accessing the center with respiratory symptoms (usually cough) are given surgical mask, if they do not have it already.

2. MEDICAL AND PSYCHIATRIC VISITS AND INTERVIEWS, PSYCHOLOGICAL AND PSYCHOSOCIAL ASSESSMENT

Visits and interviews are only scheduled in case of urgencies or for unstable patients who need support and monitoring. Non urgent visits and check-ups are postponed. Group therapy is suspended and replaced by on-line contacts with the patients.

3. STRENGTHENING PHONE SUPPORT TO PATIENTS

Phone support is enhanced to manage any critical situation, counseling interventions and phone interviews.

4. PREVENTION ACTIVITIES

Prevention activities are currently suspended.

5. ACCESS TO LONG-TERM CARE FACILITIES
Patients who need to be admitted to long-term care facilities, when accepted, must have tested negative for COVID-19 and be visited by the physician of the Center the day of admission or the day before.

6. COMMUNITY CARE CENTER

The community care center is currently closed, but workers are regularly in touch with patients by phone to provide support and monitor their conditions. The Center is a semi-residential recovery facility for drug and alcohol use disorders targeted towards patients with severe psychiatric comorbidity (the so called “dual diagnosis”).

Once the provisions of the Presidential Decree setting out the closure of semi-residential facilities due to COVID-19 epidemic entered into force, the team started activities, actions and strategies maintain continuity of rehab services provided to users, who felt fearful of stopping their recovery program.

Users were informed personally about the closure and the ways to keep daily contact, about the activities to be carried out at home to continue their rehab pathway. The main message conveyed was that the facility was closed but community care center and workers were still working and their recovery programs would not have stopped.

Workforce were involved in planning the new interventions to be provided, in training activities aimed at developing new tools meant for managing the emergency, in sharing and discussing cases both internally and externally, maintaining direct communication with users.

Objectives:
- Taking charge of the patients and specific recovery aims should be maintained
- Supporting self-care by offering tools to use in daily life
- Enabling new intervention and communication strategies
- Monitoring psycho-physical state
- Preventing risky behaviors
- Maintaining communication between the community care service and the patient in household isolation

Activities and actions for users:
- Users are taken to the check-ups scheduled in accordance with the Addiction Recovery Service
- Users are sent cognitive-behavioral self/monitoring sheets to be filled in with time setting, daily goals, small activities to be carried out;
- Sheets are collected with daily checking session, emotional state monitoring and suggesting strategies to take advantage of own resources
- Support communication to group of users through enhancing every group member
- Sending information, updates and support to understand restrictions and promote behaviors to avoid spread of coronavirus
- Audio messages from workers
- Video-tutorial to make small objects, or about leisure time activities and cooking
- Daily text messaging to enhance group climate and promote mutual aid
- Keeping in touch in the early mornings, evenings and weekends to send material for leisure time activities: audiobooks, book recommendations, websites, movies to stimulate discussion in the week to come;
- Availability by phone at weekends;
- Phone interviews or videocalls scheduled every two days with the assigned worker;
- Not scheduled phone calls and requests by users and family members;
- Accepting phone calls by former users of the Community care Center, currently followed up by the Addiction Recovery Service, who consider workers of the center as their reference sources in a time that is hard to understand;
- Setting up of a broadcast group active since the closure date of the center, through which one can exchange text messages and material with the worker acting as communication mediator;

Some data:
- 10 users are currently followed by the community care center, 3 of which are taken care of by both the addiction recovery service and the psychiatry
- 3 workers working to integrate the activities of the center in the users’ daily life, despite the center is formally closed
- At least 6 structured phone interviews per day
- Acceptance of an average of 2 users in critical conditions per day
- About 40 communication actions per day from users and workers
- At least 3 weekly contacts with family members facing difficulties in managing their loved ones or frustration due to forced cohabitation, fears that isolation could cause former addicts to relapse
- On average, 1 daily request out of 10 is about the risk of substance use
- More than a half users experience depressive moods
- Most users would like to share their daily experiences and collect inputs to help them go on in their recovery pathway and feel part of a group

Some users have been seeking support with online lessons on how to use smartphones to download files, share audio and video, start a video call or make videos about the activities carried out. Unfortunately, some users do not have internet connection allowing to be online for different hours a day. In light of these difficulties, we are considering to provide users with the tools they are missing or to provide connection to disadvantaged users.

The ICT technician and team are scheduling further daily appointments on a web platform. During these weeks, projects to support users’ recovery pathways were kept alive and we wish to go on this way.

Our aim is to offer the chance to live on-line the experience “physically” interrupted. That is why we are trying to restart on-line the group therapy and the psycho-educational groups.

Internal activities aimed at management and maintenance of the facility:
Even though the community care center is closed, some of the activities cannot be suspended as there is risk of deterioration and subsequent difficulties to restart when the center will open again. These are the activities related to the “Horticultural therapy”.
Psycho-educational programs at the basis of the recovery pathways include keeping communication with the service alive.

Indirect activities (back office) to support users’ recovery pathways:
- Communication with the addiction recovery service to report risky behaviors, to share the actions to be undertaken to support user’s recovery programs and to keep workers updated on patients’ conditions, especially on the most severe conditions.
- On-line team meetings
- Training about phone counseling strategies
- Collection and development of sheets, video tutorial and other materials to be sent daily to users
- Research and testing of the best web platforms to be used to ensure interaction between the worker and the patient, facilitate working in groups and protect patient’s privacy

7. SOCIAL COACHING
The activities related to the “Social Coaching” project are carried out on-line.

General objectives:
The project was launched in 2015 with some aims that are deemed useful to integrate recovery programs of users who have reached a certain degree of authonomy, but do not have personal and social resources allowing them to be independent from their families or from social services. A number of areas of intervention were identified, which cannot be included in standard recovery programs, but could be implemented in the patient’s daily life with support from an educator. Depending on the type of patient, level of impairment, age, personal and family needs, the identified areas may include:

Housing:
Support in daily life activities, authonomy development to patients with complex situations (dual diagnosis, family and social relationship problems) with the aim of supporting management of family relationships and relationships with friends and neighbors, or management of cohabitation. Depending on the cases, the need may arise to motivate patients to enhance personal and household care, to monitor household management, to handle any emergency situation, such as evictions or problems with utility contracts.

Job opportunities:
Help finding job opportunities, so as to enhance social abilities and prevent substance abuse disorders to become chronic conditions.

Managing psychiatric symptoms and possible complications:
The activity of the educator might be oriented towards identifying situations at risk of relapse in substance abuse and handling crisis and pre-existing complications related to substance abuse.

**Relationships:**
Support the relationship development and maintenance outside the service setting (volunteering, sports, cultural activities). These could be of help to reconcile users with the territory they belong to, thus stimulating or renewing interests and motivation.

**Therapeutic alliance:**
Stimulate relationship maintenance with the services and promote interdependence between families and social environment in case of patients with reduced/assisted autonomy.

**Methods:**
The educator works in a “real-life” setting, which is the patient’s house or the environment where he/she lives. This is a dynamic approach strictly related to the patients’ life and needs, which does not aim to build a dependency relationship, but includes observation of the patients’ life skills and practicing social interactions and actions under educator’s supervision.

**Evaluation:**
With the aim of measuring the progress of the project, a questionnaire was developed which is composed of 23 items divided into the 4 areas the general objectives of the project are made of. The educators involved filled in one questionnaire per each patient every three months, so as to measure situations improvements or worsenings, providing details. The items were revised according to each situation to monitor every patient’s progress over time.

**Results:**
Items are scored from +1 to -2, where scores >0 highlight a stable or positive situations with no problems nor pathologies, while <0 scores point out negative or critical situations.

8. **TURNOVER AND SMART WORKING**
Starting from March 16, we have been planning smart working and staff turnover to ensure continuity of service. On duty nursing staff is 1-2 nurses at a time.

**Consultants/collaborators**
Consultants hired to carry out specific project tasks are currently out of the office and carry out back office activities at home.

**Internships**
Internships for psychologists, educators, social workers are suspended.

9. **MANAGEMENT OF THE ACTIVITIES TO BE CARRIED OUT ON SITE THAT CANNOT BE POSTPONED**

| SICKROOM | Medication prescription/administration and |
10. CONTACT MANAGEMENT
Patients and personnel contacts with suspected or confirmed COVID cases have been dealt with according to the Regional procedures and in collaboration with the Public Health division.

ANNEX 1.
ON-LINE SOCIAL COACHING
The tools in use in the social coaching program were revised to overcome the impossibility to meet users due to COVID-19 outbreak.

Objectives:
- Maintain the educational intervention and relationship with the user
- Activate the coaching program for those users who were taken care of by the Community care center and therefore need support and structured interventions other than the serviced provided by the community center
- Alongside the specific objectives laid down in the individual program in its usual version, define micro-goals related to everyday life and self-care in this challenging conditions affected by restrictions and changes.
- Intensify monitoring and support tools

Tools:
- Telephone and/or personal computer
- User’s sheet describing the specific intervention

Methods:
- Weekly schedule of 2 appointments per user
- Agree on the most appropriate ways of communicating according to the user’s condition
- Activate the agreed upon procedures among the following: phone call, video call via whatsapp, skype

Strategic interventions:
- Stimulate description of own daily life and emotions
- Promote implementation of good practices related to COVID-19 emergency
- Evaluate risky situations
- Support user’s thinking and possibility to express doubts and worries
- Offer positive examples to avoid depressive states or desire of substance use to come to light
- Activate the Service in case of dangerous situations for the user
# Checklist for SARS-CoV2 Infection Prevention and Control in Long-Term Care Facilities

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Located In</th>
<th>Facility/Service Manager</th>
<th>Facility/Service Coordinator</th>
<th>Date</th>
</tr>
</thead>
</table>

## Structural and Organizational Aspects

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hospitalization</th>
<th>Outpatient Care</th>
<th>Home Care/Community Care</th>
<th>Other</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number of Users</th>
<th>Hospitalization Number</th>
<th>Outpatient Care Number</th>
<th>Home Care/Community Care Number</th>
<th>Other Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Facility With</th>
<th>One Floor</th>
<th>More than One Floor</th>
</tr>
</thead>
</table>

## Specific Structural Aspects

<table>
<thead>
<tr>
<th>Video Door Entry System</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception/Front Office</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

## Measures Implemented During COVID-19 Epidemic

<table>
<thead>
<tr>
<th>Measure</th>
<th>Completed</th>
<th>In Progress</th>
<th>Not Started</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. General Measures and Strengthening of HAIS Prevention and Control Programs and Principles</strong></td>
<td></td>
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</tr>
<tr>
<td>1.1 There is a specific COVID-19 preparedness plan</td>
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<tr>
<td>1.2 A copy of the COVID-19 preparedness plan is available at the facility and accessible by staff</td>
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<tr>
<td>1.3 A plan is in place for protecting residents,</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.4</strong> A person has been assigned responsibility for monitoring HAIs and COVID-19</td>
<td>Insert name, title, and contact information of person responsible</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.5</strong> Standard precautions are applied when taking care of all residents, while specific precautions are applied based on assessment of risk of transmission</td>
<td></td>
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</tr>
<tr>
<td><strong>1.6</strong> Assessment of compliance to hand hygiene practice has been carried out</td>
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</table>

**2. SPECIFIC MEASURES: EARLY IDENTIFICATION OF SUSPECTED COVID-19 CASES AMONG VISITORS, PERSONNEL AND RESIDENTS**

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>2.1</strong> Visitors restrictions have been implemented (as set out in the Decree of the Prime Minister dated March 9 2020)</td>
<td></td>
</tr>
<tr>
<td><strong>2.2</strong> The “screening sheet for visitors” is used in the exceptional cases when visitors are allowed</td>
<td></td>
</tr>
<tr>
<td><strong>2.3</strong> There is an “access record”</td>
<td></td>
</tr>
<tr>
<td><strong>2.4</strong> The facility has a written protocol to identify, manage and monitor residents, volunteers and healthcare workers with COVID-19 infection (es. weekly or daily reporting about residents and personnel with COVID-19 infection)</td>
<td></td>
</tr>
<tr>
<td><strong>2.5</strong> The facility has instructed HC workers to</td>
<td></td>
</tr>
</tbody>
</table>
regularly monitor themselves for fever and symptoms of respiratory infection and, in case of symptoms onset, to avoid going to work following what the local health authorities for COVID-19 risk assessment laid down

2.6 Provisions were set out which define how to monitor for fever and flu-like symptoms and symptoms of a respiratory infection or shortness of breath and other risk factors (eg. Contact with confirmed COVID cases) in **newly admitted or re-admitted residents**

2.7 Provisions were set out which define how to monitor for fever and flu-like symptoms and symptoms of a respiratory infection or shortness of breath and other risk factors (eg. Contact with confirmed COVID cases) in **residents**

2.8 Provisions were set out which define how to immediately inform medical staff about the situation and keep carrying out diagnostic investigations and go on with the resident’s management

2.9 The facility has a protocol for active monitoring of respiratory infections among residents and healthcare staff

<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
<th>COMPLETED</th>
<th>IN PROGRESS</th>
<th>NOT STARTED</th>
<th>DOCUMENTS</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Alcohol-based handrub for hand hygiene is available</td>
<td></td>
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</tr>
</tbody>
</table>

**SUPPLIES AND RESOURCES**
3.2 The sinks are stocked with soap and paper towels for hand washing

3.3 Signs are posted indicating appropriate IPC precautions and PPE use

3.4 The facility provides PPE (e.g. Gowns, surgical masks, gloves and face shields) to be used when taking care of people with respiratory symptoms

3.5 Trash disposal bins are positioned inside the resident’s room to make it easy for staff to discard PPE after removal

3.6 The facility has a protocol to monitor supply levels (e.g. Medical devices and PPE)

3.7 Surgical masks are available for residents

<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
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</tr>
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</table>

4. HEALTHCARE TRAINING TO HELP THEM CORRECTLY ADOPT PRECAUTIONS/ISOLATION MEASURES

4.1 All healthcare workers and cleaners received specific training on basic principles of IPC, with special attention to standard precautions

4.2 Personnel taking care directly of residents and cleaners received specific training on how to avoid spread of SARS-COV-2 infection

4.3 The facility has a plan to record compliance to the recommendations for COVID-19 infection in healthcare workers

4.4 The facility has a plan for expediting the credentialing and training of non-facility/newly hired HC workers in case of staffing crisis
<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
<th>COMPLETED</th>
<th>IN PROGRESS</th>
<th>NOT STARTED</th>
<th>DOCUMENTS</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 AWARENESS AND TRAINING OF RESIDENTS AND VISITORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1 Plan to increase awareness and train residents and visitors with regards to standard precautions about how to prevent SARS-COV-2 infection has been defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5.2 Animation and socio-educational activities were organized to convey these messages correctly, organizing small groups and respecting distance of at least one meter between the participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 REMINDERS TO PROMOTE APPROPRIATE BEHAVIORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 Visual reminders, such as posters, brochures, screen-savers about COVID-19 were developed about hand hygiene, social distancing and other precautions, as well as the need to monitor own health conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 COMMUNICATION AND OPERATIONAL MANAGEMENT</td>
<td></td>
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</tr>
<tr>
<td>7.1 Key public health points of contact during a COVID-19 outbreak have been identified</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7.2 A person has been assigned responsibility for communications with public health authorities during a COVID-19 outbreak</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Insert name and contact information*
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.3</td>
<td>A person has been assigned responsibility for communications with staff, residents, and their families regarding the status and impact of COVID-19 in the facility. <em>Insert name and contact information</em></td>
</tr>
<tr>
<td>7.4</td>
<td>The facility has a process for inter-facility transfers of residents with suspected or confirmed COVID-19 infection</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
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<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>POSTMORTEM CARE</td>
</tr>
<tr>
<td>8.1</td>
<td>A plan has been developed for postmortem care and disposition of deceased residents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEASURES IMPLEMENTED DURING COVID-19 EPIDEMIC</th>
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<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>ENVIRONMENTAL SANITATION</td>
</tr>
<tr>
<td>9.1</td>
<td>Cleaning plan has been revised/updated with special attention to frequency, use of specific disinfectants, high-touch surfaces, restrooms, shared areas, room ventilation</td>
</tr>
<tr>
<td>9.2</td>
<td>Facility ensures HC personnel have access hospital-grade disinfectants to allow for frequent cleaning of high-touch surfaces and shared resident care equipment.</td>
</tr>
</tbody>
</table>
REFERENCES:

- Rapporto ISS COVID-19 n. 4/2020 INDICAZIONI AD INTERIM PER LA PREVENZIONE E IL CONTROLLO DELL’INFEZIONE DA SARS-COV-2 IN STRUTTURE RESIDENZIALI SOCIOSANITARIE Gruppo di Lavoro ISS Prevenzione e Controllo delle Infezioni, aggiornato al 16 marzo 2020
- Coronavirus Disease 2019 (COVID-19) Preparedness Check list for Nursing Homes and other Long-Term Care Settings CDC [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)
- USL Umbria 2 MISURE DI PREVENZIONE NEGLI OSPEDALI E NELLE STRUTTURE SANITARIE
Scheda per la rappresentazione dell’esperienza

**Level:** Local Health Authority

**Topics:**
- Planning and implementing Special Units for Continuity of Care – household management of COVID-19 patients

**Contact details:**
E-mail: dirsan@pec.aslnapoli3sud.it  Phone number: 081.8490641/43

**Forward**

The Local Health Authority Napoli 3 covers an area of about 620 sq km, including 57 municipalities and a resident population of 1,070,000 inhabitants. There are 13 districts and 8 hospital facilities. In the municipality of Boscotrecasa, a COVID hospital was created, with 51 beds, 11 of which are intensive care beds.

**Special Units for Continuity of Care**

In accordance with the provisions set out by Decree n. 14 of March 9 2020, the organization has been working to implement measures to guarantee household management of COVID-19 patients who do not need hospitalization.

First of all a Special Units for Continuity of Care was set up covering 9 municipalities thanks to the so called Hospital car, that helped the organization identify strengths and weaknesses of the system in place (swot analysis), so as to set up more efficient and safe Special Units.

These Special Units work 7 days a week from 8 am to 8 pm (two shifts with two physicians and possibly one healthcare worker per hospital car per shift) to carry out household monitoring activities to COVID-19 patients and/or testing cohabitants and diagnose recovery (two negative tests 24 hours apart).

**Step 1 - Planning the Special Units Activities**
- Defining number of units to be set up and their geolocation
- Identify the areas where the Special Units might be settled according to
  - Geolocation of the surrounding territory
  - Presence of structural criteria and appropriate equipment
- Hospital cars equipped with:
  - Dedicated cockpit for driver/healthcare worker/civil protection worker
  - Double entry to ensure healthcare workers use a “dirty” pathaway and a “clean” pathway
  - Separated space to allow physicians to wear and take off PPE
Hospital cars are also equipped with sanitizers and special waste disposal bins for disposable PPE. Hospital cars are sanitized at every shift change. Sanitization takes place in two steps: the first one is cleaning and disinfection and the second one includes using aerosolized hydrogen peroxide systems (biological risk). The mentioned sanitization will be carried out by dedicated workers, specifically trained and equipped with PPE, who also take care of transporting special waste disposal bins in a dedicated space in the Special Unit headquarter, to be subsequently disposed by the company in charge of waste disposal.

- Medical staff to be dedicated to the Special Units was hired through a specific call launched in accordance with the provisions of the Decree n.14 of March 9th 2020

**Step 2: organizing the procedures necessary for the Special Units setting up**
- The Infection disease team of the organization developed a procedure for household management of COVID-19 patients
- Need assessment and purchase of PPE necessary to the healthcare workers of the Special Units. For every single entry of every single worker, the following PPE are envisaged:
  - FFP2 mask
  - Hat
  - Long sleeved disposable gown
  - Recyclable facial shield
  - Gloves (3 pairs)
  - Protective footwear
  - Waterproof protective jumpsuit (2 per each physician per each workshift)
- The Special Units’ medical staff were provided:
  - Guidance for reasonable use of the PPE for SARS-COV-2 infections
  - Recommendations for correct swab sampling, sample storage and analysis to identify COVID-19 infections
- Documents for every household access was prepared:
  - Patient’s monitoring sheet
  - Informed consent form
  - Privacy consent form
  - Recommendations for correct household management of COVID patients to be provided to patients and/or cohabitant family members in order to avoid contagion
- Documents to be given at the end of the workshift to the Director of the District and to the person in charge of data processing for subsequent activities:
  - Document about loading/unloading of PPE used and sanitizers, with the aim of ensuring the necessary supplies for the activities to be carried out the following day
• Certification of sanitization/disinfection of the hospital car and/or of the Units’ headquarters and/or car used, through defined sanitization/disinfection/waste disposable procedures.
• Minimum medication supply is provided to physicians on duty, to be stored clean space of the hospital car and to be left at positive patient home in sufficient quantities.

- Training courses for medical staff of the special units regarding
  • Implementation of the household therapeutic procedure
  • Correct use of PPE (dressing and undressing of PPE)
  • Field training aimed at moving correctly inside the hospital car and practical dressing/undressing test

- Official communication was sent to the mayors of the involved municipalities, should logistic support be needed and phone call to COVID patients to be monitored. Mayors made available traffic policemen and civil protection staff to go with the Special units’ medical staff in disadvantaged aread and/or facilitate driveability and hospital car parking.

**Step 3 - Household psychological support**
Psychological support to COVID positive citizens in household isolation and their families is provided 7 days a week from 8 am to 8 pm by calling number 800936630.
The following problems will be dealt with:
- Social problems, thanks to a team of social workers alongside with the social services of the local authorities and the competent social offices
- Psychological problems, thanks to a team of psychologists who will contact directly the citizens requiring support

**Step 4 – setting off the Special Unit for Continuity of care and the hospital car**
The prevention unit communicates the list of COVID patients with address and phone number. Before starting their activities, the medical staff of the special unit will be equipped with: PPE, patient’s monitoring sheet, informed consent form, privacy consent form, recommendations for correct household management of COVID patients to be given to the patient and/or cohabitants family members, medication as laid down in the organizational procedure.

**Step 5 – monitoring of the activities**
A steering committee will monitor the activities carried out by the special units and PPE consumption. Data will be used for planning future activities and made available to the organization epidemiological services and at regional and national level.
Transforming the non-emergency call-on service into COVID-19 contact point

The aim is to provide users with information about the COVID-19 outbreak and be a contact point among users and the Hygiene and Public Health Service. To this end, the non-emergency medical call-on service was assigned the task of providing information – 7 days a week, 24 hours a day – about reorganization of healthcare and social services of the territory belonging to the Local Health Authority due to COVID outbreak to both asymptomatic patients and patients with mild or severe symptoms under surveillance who need information and/or contact with the healthcare service and to family members of patients hospitalized in the Tortona COVID hospital.

The European harmonized service of social value, whose activation was suspended due to COVID emergency, resulted in an extremely important base to start the aforementioned activities. Having trained workforce and an application – even though in a test version – the Local Health Authority was able to collect data about people contacting the service and the needs expressed besides the restrictions imposed by the emergency situation, thus transforming the non-emergency call-on service into a COVID contact point.

Workers answer 24 hours a day to users who need:
- Contact with a physician of the Hygiene service following onset of suspect symptoms for possible subsequent patient management by the Hygiene and Public Health Service
- Contact upon request of the General Practitioner for possible subsequent patient management by the Hygiene and Public Health Service
- Information about approval by the dedicated task force of swab testing requests reported on the Hygiene and Public Health Service Platform
- Information about swab testing results, with communication from workers about the medical report situation. In case the medical report is ready, users are directly informed whether they tested negative. Contrarywise, a report is made about the need to contact the GP
- Information about the reorganization of the territorial services

During specific time-slot, workers:
- Help family members to contact the patients hospitalized in the COVID hospital and the physicians, calling back the user (who fills in a contact form) in case the physician is not available.

24 hours a day, workers:
- Collect reports about problems concerning quarantine notifications forwarding duly filled contact form to the competent service
- Set off the quarantine suspension procedure, once the patient tests negative once or twice, forwarding duly filled contact form to the competent office
- Forward calls to the physician of the Hygiene and Public Health Service when they come from people with certain disease (eg. Cancer or hematological patients, patients with cardiovascular disease, patients who underwent or are waiting for transplantation), calling back the user in case the physician is not available
- Fill in and forward to the competent office the contact form of COVID patients to be discharged from hospital who need post-discharge follow-up by the Hygiene and Public Health Service and/or by territorial services.

The service proved to be very useful, on the one side, to provide user with a 24-hours service able to steer their request in a moment of reorganization of service, on the other hand to set off, through filling in the contact forms, of quarantine suspension or correction and communication of swab testing results.
Transforming the non-emergency call-on service to allow continuity of service, helped ensure continuity of care to COVID patients and to people involved in the emergency.