Sharing of experience

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Declaration

- No conflict of interest
- Not an expert in infection control

Sharing of my first 7 weeks' experience at Dept. level in this battle!

Governing structure in HK

Department of Health (DH)

Hospital Authority of Hong Kong (HA)

Clusters and Individual Hospitals

C.O.S. of all 8 O&G units of HK

HA and hospital level

- Escalation to Emergency level
- Suspended:
 - All clinical attachment or teaching: medical students, nursing, midwifery students etc
 - Volunteer service / visit
 - +/- Educational talk
 - Visitors to hospital
 - → husband is not allowed to accompany labour (all OBS units adopted the same policy)



Hospital level

- HCE (Hospital Chief Executive)
- Infectious control team
- Quality and safety team (Q&S)
- Human Resources Department (HR)

O&G

Doctors & midwives

Infection control team

Q&S team

HR Dept.

Each Dept.

Paediatric

Anaesthesia / ICU

Hospital level

- Set up isolation wards / ICU area to management the confirmed or suspected case
 - Dept. of Medicine and Dept. of ICU
- Laboratory to provide the COVID-19 tests
 - Initially, issue results once per day to now 3 times per day
- Enhance communication
 - WhatsApp group to disseminate information and reply queries of clinical dept.
 - Frequent COS and DOM (Dept. manager) meetings to enhance communication
 - Already 4 meetings for past 7 weeks (previously once / month)
 - Explanation of emergency level of whole HA
 - Review the responses of each Dept.
 - PPE / N95 stock and plan issues
 - Updates on PPE / new HR policy

Hospital

- HR Dept.
 - Arrange staff quarters for staffs who work in high risk area and who does not want to transmit virus to their family members
 - Set up measures for staff who cross the border (China) everyday to work
 - Quarantine policy set by Government: 14 days if one comes back from China
- Hold staff forums
 - Speaker: Experts in Infection Control
 - Understand the disease, Explain protective measures

ICN

- Work with ICN of HA Head office and DH
- Set up policy of bed assignment for patients
 - → Clear instruction to clinical staffs

		Symptomatic patients	Asymptomatic patients (i.e. due to other medical condition not related to COVID-19)
Quarantine camp	 Close contact of confirmed cases From infectious area, e.g. Hubei, Korea 	Airborne Infection Isolation Room (AIIR)	AIIR
Home quarantine	Mainland China other than Hubei province	AIIR	Corner bed with adequate space
Medical surveillance	Other contacts	AIIR / Surveillance ward	Managed as general patients

ICN

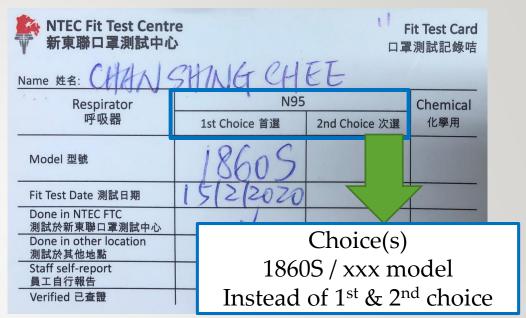
- Work with ICN of HA Head office and DH
- Set up policy of bed assignment for patients
- Set up (and update) reportable disease definition
- Set up protective measures for all staffs
 - Appropriate protective measures for appropriate work
- Reinforce PPE audit at Dept. level
- Provide N95 fit test to staffs
 - Even retest

Updated to ihospital, Can be assessed by all managers and staffs



N95 fit test

- Add more sessions (even outside office hour)
 - Consider prioritization
- Experience sharing:
 - After 6 weeks, one model (1870) is the only model that fits a significant proportion of staffs; however, the stock of that model was limited.
 - That proportion was deviated from other test centers (at 2 standard deviations)
 - Retest was run (again according to priority)
 - Out of 111 staffs \rightarrow only 7% has one model
 - Need explanation to staffs that they are not asked to use an inferior model but an additional appropriate model



Q&S team

- Stocking taking of protective measures: surgical masks, PPE, N95 etc.
- Purchase protective measures
- Set up measures to reduce use of PPE at different levels
- Set up triage area at clinic
- Instructions:
 - Avoid crowding in ward area
 - No visitors; stop volunteers' services
 - Reduce service activities in whole hospital
 - Advise Dept. reduce elective procedures, including cutting elective operative lists.
 - Rearrange educational talk

Department level

At week 0 – week 2

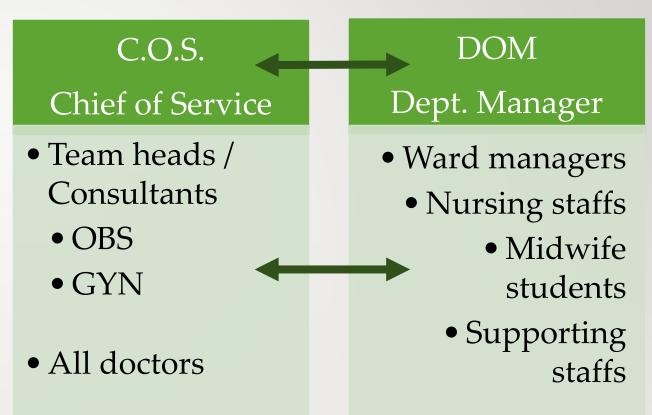
Response level changed during CNY

	1月 JANUARY						2月				FI	EBRU	IARY	3月		MARCH						
1	S	М	T	W	T	F	S	S	М	T	W	T	F	S	S	М	Т	W	T	F	S	
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1	5 +-	6 小寒	7 +≡	8 +四	9 +五	10 + *	11 +t	2 初九	3 初十	4 立春	5 +=	6 +≡	7 +四	8 +五	8 +±	9	10 +t	11 +A	12 +h	13	14	
١	12 +A	13 +h	14	15	16	17 #=	18	9 +六	10 +t	11 +八	12 +h	13 =+	14	15	15	16	17	18	19 #*	20春分	21	
		Weel	k 0		23 th	24 ₌₊	25 正月	16	17	18 #五	19 雨水	20 #±	21	22 #ħ	22 #ħ	23 ≡+	24 ^{三月}	25	26	27	28	
	26 初三	27 初三	28	29	30	31 初七		23 二月	24	25 初三	26	27	28	29 初七	29 初六	30	31					

Chinese New Year

Department level

- Enhance communication with staffs
 - Emails
 - WhatsApp
 - Dept. meeting
- Staff safety is a priority of Dept. and Hospital
- Establish workflow to guide them



Protection to staffs

- Safety measures to staff
- Arrange working clothes
 - Though available previously in clinical area, majority of staffs do not use them
 - With the help of one consultant and one clerical staff
 - → Set up clean area to collect clean working clothes and dirty clothes in office;
 - →Ensure supply

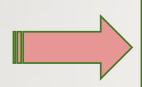




Protection to staffs



- Arrange surgical mask and stock taking
 - From collection in any site → Collect in designated area & need signature



Once, this introduced anxiety to staffs → Worried that there was restriction of protective measures to them

Explained in ad hoc meeting: This is safe guarding them and control the stock.

Anyone can obtain the mask when indicated.

- Office: before enter clinical area
- Designated clerk to keep stock taking and distribute
- Arrange N95 fit test for staff
 - OBS service is necessary, pregnant women might return from China
 - → Applied as priority Dept. for staffs

Approved by Hospital \rightarrow Set priority among Dept: Doctors: 1st call \rightarrow 2nd call / pregnant staffs \rightarrow consultants being the last

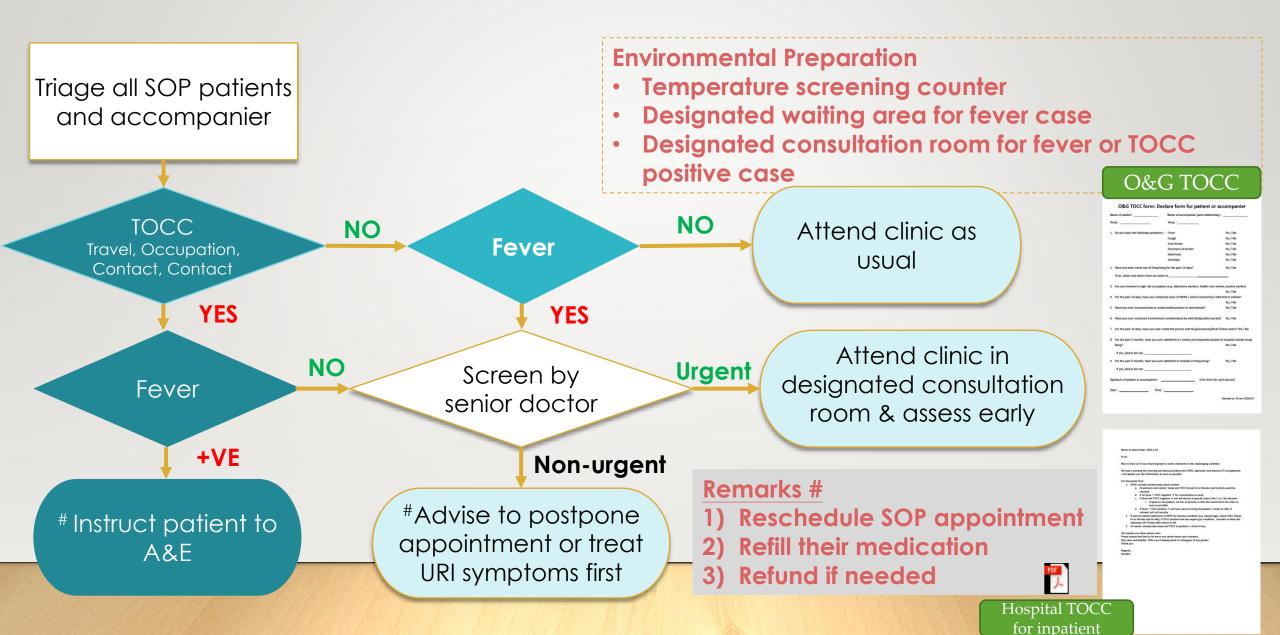
Nursing: starts with midwives in delivery suite

Triage (TOCC screening)

- Set up triage protocol
 - Safe guard the staffs and patients who use our services
- Set up **triage area & manpower** in outpatient clinics and wards
- Pre-admission for elective cases
 - E.g. elective CS, elective Gyn operations, or even medical evacuation of uterus
 - Phone contact and ensure screen negative for TOCC before admission
 - Patients scheduled for elective Gyn operations: Doctors to contact them
 - Engaged the staffs
 - Rearrange operation if needed, avoid unnecessary logistics if this was done by nurses/clerks



Workflow of Triage for O&G Outpatients



O&G TOCC form: Declare form for patient or accompanier

Name of patient :		Name of accompanier (and relationship) :								
Temp :		Temp :								
1.	Do you have the following symptoms :		Nes / No							
		Cough	Yes / No	Madiciad						
		Sore throat	Yes / No	Modified						
		Shortness of breath Diarrhoea	Yes / No Yes / No	from the long						
		Vomiting	Yes / No	form						
2	Have you been travel out of Hong Kong	for the past 14 days?	Yes / No							
	If yes, when and where have you been	to	10							
3,	Are you involved in high risk occupation	n (e.g. lebonatory workers, health-care works	er, poultry wo	rker)						
			Yes / No							
4	For the past 14 days, have you contacts	ed cases of MERS / novel Coronovirus/ wild b		*						
			Yes / No							
5	Have you ever consumed raw or under	cooked poultry or wild animal?	Yes / No							
6	Have you ever contacted environment	contaminated by wild bird/poultry excreta?	Yes / No							
7	For the past 14 days, have you ever con	stacted person with flu/pneumonia/flever/Ch	ina visitor? Y	es / No						
8	For the past 3 months, have you ever a	dmitted to / visited /accompanied people to	hospital outs	ide Hong						
	Kong?		Yes / No							
	If yes, please list out	93								
9	For the past 3 months, have you ever a	dmitted to hospital in Hong Kong?	Yes / No							
	If yes, please list out									
Si	gnature of patient or accompanier	(One form for eac	h person)							
D	ste : Time :	<u>-</u>								

Revised on 25 Jan 2020/V2

HOSPIT PRINCE OF

Name & Signature:

Rank:

F	PRINCE OF WALES HOSPITAL	HN/ OPD No.: Name:	ID No.	:				
	Checklist for	se Name:						
IL	I/ GE Symptom and TOCC							
	Influenza-like-illness (ILI) / Gastroenteritis (
-	Fever		>					
\vdash	Cough		→ Droplet Precautions for					
\vdash	Sore Throat		patient with					
\vdash	Shortness of breath			respiratory symptoms				
	Diarrhea and/ or vomiting			→ Contact				
	MDRO: MRSA/ ESBL/ CRA/ MRAB/ MDRA/ C	CPE/ VRE/ MRPA (Index/ Contact)		Precautions				
	None of above	· · · · · · · · · · · · · · · · · · ·						
	Information cannot be obtained							
2	TOCC (*Al: 10 days/ **MERS: 14 days befor	re onset of symptoms)						
	History of recent <u>Travel</u> to the affected areas ((AI/ MERS)						
	Date of travel: from	to		*If ILI symptom plus TOCC +ve				
	Area:		(e.g. both T+C					
	High risk <u>Occupation</u> (e.g. laboratory workers,	ers)	+ve)					
	History of unprotected <u>Contact</u> with:		→ Prompt					
	a Human case/ wild bird/ poultry confirmed w		isolation					
	poultry in areas known to have Al infection months, OR	in poultry and/ or humans in the re	cent 6	→ Airborne, Droplet &				
	b Confirmed or suspected case of MERS			Contact				
	History of unprotected C ontact with environment	ent contaminated by wild bird/ poul	trv	Precautions				
	excreta in areas known to have animal or loca		,	→ Inform MO & IC team No Unknown				
	Clustering of ILI/ pneumonia (≥ 2 affected pe	ersons)						
	None of above							
	Information cannot be obtained			Syn				
	e refer below links for epidemiology information (affected areas/ count an Influenza (AI): http://www.chp.gov.hk/files/pdf/global_statistics_avia			npto				
**Mid	dle East Respiratory Syndrome (MERS): http://www.chp.gov.hk/files							
3	History of hospitalization outside Hong Ko	ing in the past 12 months	Г	No T				
	Yes → Empirical Contact Precautions → For Carbapenemase Producing Enteroba	actoriaces (CDE) and Vancomycin		Unknown				
	Resistant Enterococci (VRE) screening.			Onknown				
4	History of hospitalization in Hong Kong oth							
	Yes → Empirical Contact Precautions			No				
	→ For Carbapenemase Producing Enteroba Resistant Enterococci (VRE) screening.		Unknown					
5	Types of Isolation Precautions required:							
	Droplet Precautions Contact Precautio	ons		□ Nil				
D - 1		-	I					
Dat	e:							

Version 9

Effective Date: 1/1/2019 Form No. 285

Outpatient services

- Cancelled antenatal talk (~300 participants) and fertility talk (~30 couples)
 - → Avoid crowding
- Or Conduct small group talk
 - Breast feeding
 - Educational talk to GDM patients
 - Continence advise (reduce from 30 participants/group to ~10 participants/group)
 - Adjust the sitting plan
 - +/- a talk for a shorter duration

If TOCC +ve:

- Postpone appointment till fulfill 14 days quarantine or become asymptomatic
- Arrange drug refill, then rearrange appt.
 according to their disease severity
 - Even few months later
- X DSS1 → arrange DSS2
- See walk-in cases if TOCC –ve and no fever, especially semi-urgent cases
 - → Avoid repeat logistics (repeat TOCC in next few days)
 - → Avoid overbooking later

Set up protocol for admission

Workflow for managing suspected

Novel Corona Virus cases

Workflow for managing suspected Novel CoronaVirus cases

Draft by: Dr. SC Chan Date: 27th Jan 2020

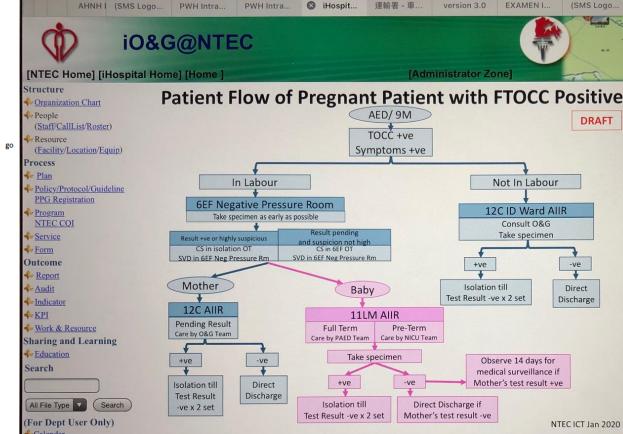
Scope of patients

- 1. Being isolated in PWH but status not yet certain
- If NEGATIVE status of patient is known, the patient is downgrade from the risk. Apply the current practicing rules.

Consultation from other specialties

- 1. If there is no urgent active Obs / Gyn problems, decline the urgent consultation.
- 2. If there is active Obs / Gyn problems, assess the patient according to urgency.
 - a. If not urgent, refer to SOPD according to current guidelines.
 - b. If there is active Obs problems, e.g. dec FM or in frequent abdominal contraction:
 - Can seek one midwife (call AN ward to coordinate) to assess the complaint of
 patient and perform CTG in isolation ward etc; midwife will send the CTG to call
 team for assessment and manage accordingly. MO will assess the patient
 preferably after the NEG status of CoronaVirus is known.
 - c. If there is active Obs problems, e.g. PVB that need assessment:
 - Call team assess the patient, preferably limit the number of call team member assess the patient
 - 1. Follow standard hygiene and protection rules, PPE if appropriate
 - ICN stated that if the above measures are followed, it is not regarded as 'contact'. Please follow the Novel CoronaVirus status of patient.

Admission guide for OBS cases



Admission guide for OBS cases during the novel Coronavirus outbreak

Date of issue: 6 Feb 2020

All patients: Check temperature + TOCC form

- a. If no fever or respiratory symptoms + TOCC negative
- → admit as usual
- b. If fever or respiratory symptoms but TOCC negative
- → inform MO and assess patient in side room (bed 28 & 29) as soon as possible
- c. If fever or respiratory symptoms + TOCC positive with NO active obs problem → go to A&E and admit to Medical ward
- d. If fever or respiratory symptoms + TOCC positive with Active
 → admit to NEGATIVE pressure room in 6EF for assessment
- 1. nCoV test should be arranged as soon as possible to triage the patient
- 2. Report suspected nCoV case according to reportable criteria:

Surveillance and case reporting (related to the surveillance for the cluster of pneumonia with unknown aetiology in Wuhan)

All registered medical practitioners are required to notify the Centre for Health Protection if patient fulfilling the reporting criteria (as of 23 Jan 2020)

- Patient presented with fever OR acute respiratory illness, OR with pneumonia; and
- Patient who had either one of the following within 14 days BEFORE ONSET OF SYMPTOM:
 - With travel history to Hubei Province (irrespective of any exposure to a wet market or seafood market); OR
- (ii) Visited a medical hospital in Mainland China; OR
- (iii) Had close contact with a confirmed case of novel coronavirus infection while that patient was symptomatic.

should be isolated immediately and notified the Central Notification Office (CENO) of the CHP via fax (2477 2770), phone (2477 2772) or CENO

On-line (https://cdis.chp.gov.hk/CDIS CENO ONLINE/ceno.html).

For details, please refer to "Letters to Doctor" at CHP website https://www.chp.gov.hk/en/healthprofessionals/31/index.html

Week 3 - 7 onwards

At hospital level:											FEBRUARY			3月				MARCH				
High co			_					E &	N	95	N	Т	F	S	S	М	Т	W	T	F	S	
	→ s	sus	sta	in	ab	ili	ty?							1 初八	1	2 初九	3 初十	4	5 驚蟄	6 +=	7 +四	
	5 +-	6 小寒	7 +≡	8	9 +五	10 +±	11	2 初九	3 初十	4 立春	5 +=	6 +≡	7 +四	8 +五	8 +五	9 +>	10 +t	11 +A	12 +h	13	14	
	12 +/\	13 +h	14				_ /	>9 +☆	10 +t	11 +A	12 +h	13	14	15	15	16	17	18 #五	19 #*	20	21 #A	
	19 #重	20 大寒	21 #±	22	23 #h	24 =+	25 正月	16	17	18 #五	19 雨水	20 ##	21	22 #h	22 #ħ	23 ≡+	24 ^{三月}	25 初二	26	27	28	
	26 初二	27 初三	28	29	30 初六	31 初七		23	24	25 初三	26	27	28	29 初七	29	30 初七	31					
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Protective measures

- Reinforce appropriate protective measures for appropriate work
 - Safe to staff
 - Hold ad hoc meetings (HCE with COS and DOMs) / staff forum
 - Hold ad hoc Dept. meeting for explanation and reasurrance
- Reserve PPE or N95 for appropriate work
 - No PPE for non-areosal generating procedure or low risk procedures
 - E.g. only surgical mask for usual consultation

Reinforce through team heads
If violation occurs, I consider stop some private services



個人防護裝備建議 Recommended PPE



適當場合 適當保護衣 Appropriate PPE for Appropriate Settings

專科門診/專職醫療專科門診 SOPC/Allied Health SOPC

triage station including temperature-checking station

護目鏡/全面罩/眼罩■ eye visor / face shield / goggles

外科□罩/N95呼吸器■ surgical mask / N95 respirator

> 黄色保護衣■ yellow gown (AAMI 1)

> > 即棄手套■ disposable gloves



-般病人診症室 general patient consultation room



外科口罩 surgical mask

發燒病人診症室 fever consultation room

> 即棄頭帽(可選用) disposable cap (optional) 護目鏡/全面罩/眼罩■

eye visor / face shield / goggles

N95呼吸器/外科□罩■ N95 respirator / surgical mask

黃色保護衣*■

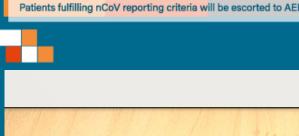
yellow gown (AAMI 1)*

即棄手套■



- *如預計有飛濺情況,可考慮穿著藍色保護衣, 或在黃色保護衣外加上防水圍裙。
- *AMMI level 3 isolation gown can be considered when splashing is anticipated. Alternatively, a waterproof apron on top of the AMMI level 1 isolation gown is also acceptable.

符合新型冠狀病毒呈報準則的病人會轉送急症室



住院區域 In-patient Area

普通病房(非進行霧化醫護程序時) general ward without Aerosol Generating Procedures (AGP)



(當需要採取空氣傳播 預防措施時) N95 respirator for airborne precautions

按標準防護措施及■ 傳播途徑防護措施 穿著其他個人防護裝備 other PPE according to standard precautions and transmission based precautions

進行霧化醫護程序時



即棄頭帽(可選用)

face shield / goggles

yellow gown (AAMI 1)*

disposable gloves

■ 全面罩/眼罩

N95 respirator

■ 黄色保護衣*

■ N95呼吸器

■ 即棄手套

disposable cap (optional)

加強監察病房 enhanced surveillance ward



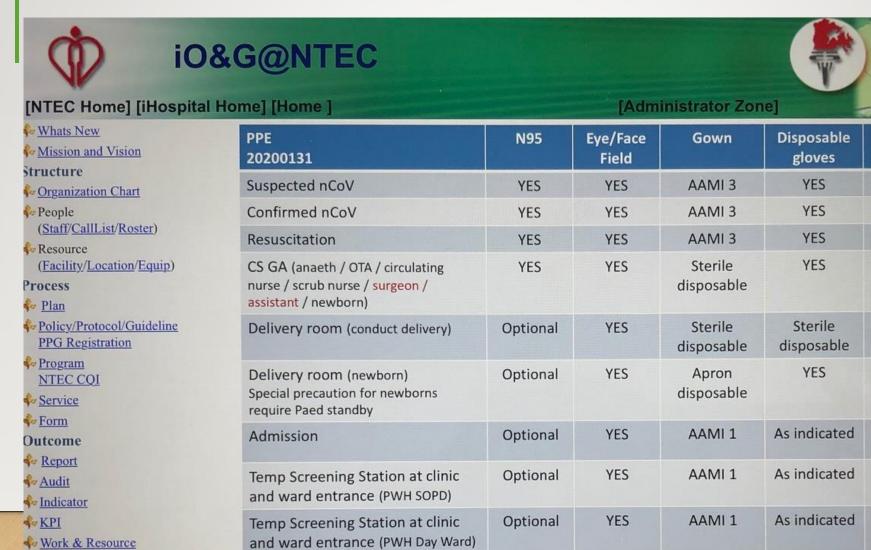
- 即棄頭帽(可選用) disposable cap (optional)
- 護目鏡/全面罩/眼罩 N95 respirator / surgical mask
- N95呼吸器# N95 respirator#
- 黃色保護衣* yellow gown (AAMI 1)*
- 即棄手套 disposable gloves
- 如預計有飛濺情況,可考慮穿著藍色保護衣, 或在黃色保護衣外加上防水圍裙。
- *AMMI level 3 isolation gown can be considered when splashing is anticipated. Alternatively, a waterproof apron on top of the AMMI level 1 isolation gown is also acceptable
- #可因應風險評估,以外科口罩替代。
- #Surgical mask could be used as an alternative based on risk assessment.

接收懷疑或確診病人的陽離病區 isolation area with suspected or confirmed nCoV case

performing Aerosol Generating Procedures (AGP)



Protective measures



Cap

Optional

YES

YES

YES

YES

YES

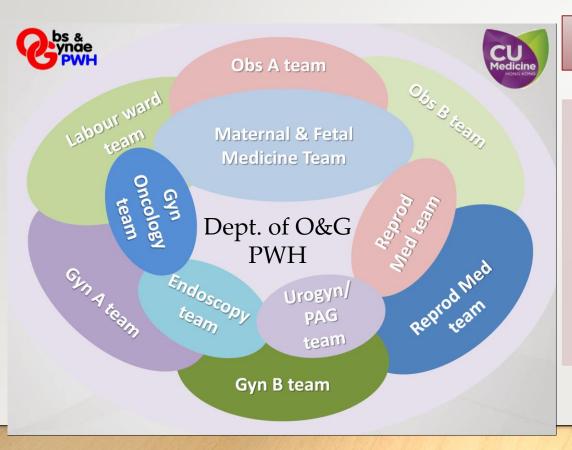
Optional

Optional

Optional

Department level

Division of work worked with each team:



OBS

- Set up protocol for high risk or suspected cases
- Workflow for Caesarean Section

Gyn oncology

• Continue their services

Gyn - others

Review the priority of other services

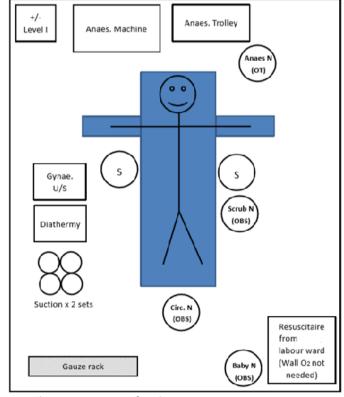
Obs service: Elective Caesarean Section

- Worked with HA and Chief of Services of all OBS units in Hong Kong
- HA sent SMS message (via mobile phone) to all patients who are scheduled elective C.S. and remind them comply with quarantine policy before their C.S.
 - → Postpone the CS if possible

OBS team: Set up workflow

- Set up workflow for reportable and confirmed nCoV cases going for caesarean section
- Conducted drill

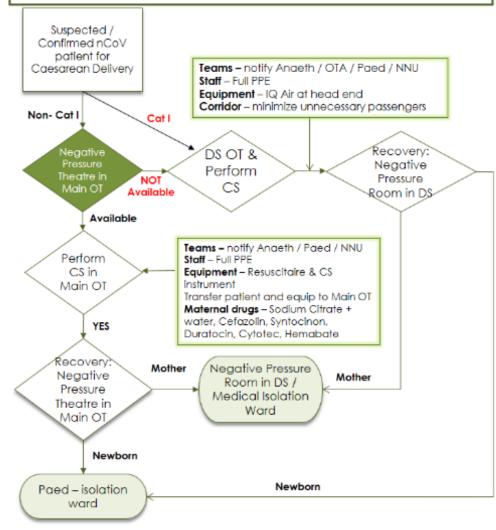
Remarks - Basic theatre set-up for Caesarean Section in Main OT:



Note: Theatre temperature at 26°C and warm gamgee.

Workflow for CS for suspected / confirmed nCoV cases

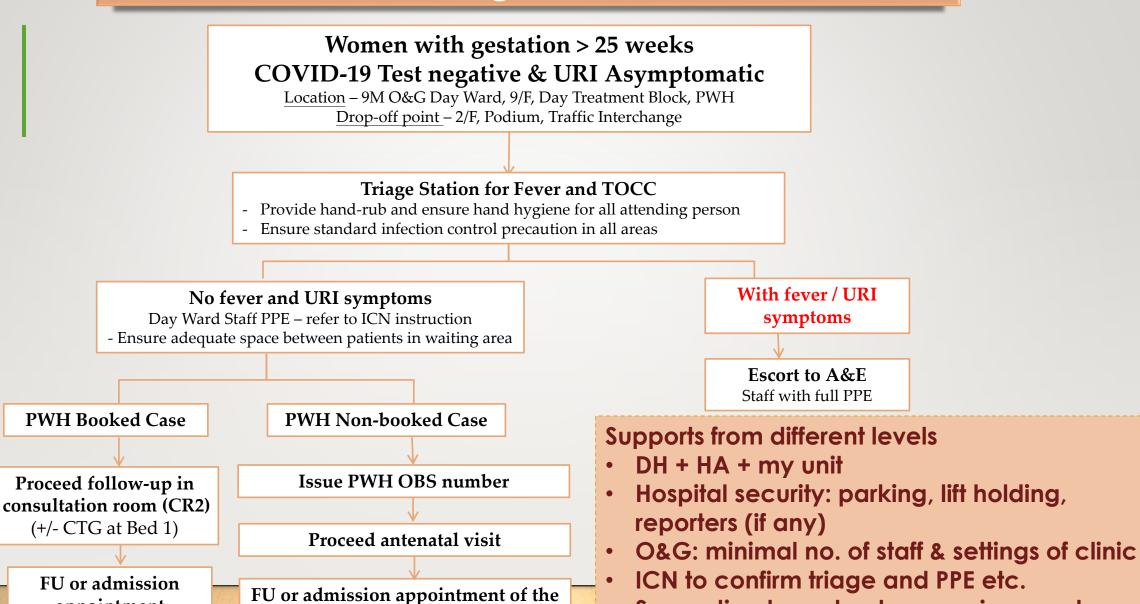
Caesarean Delivery for Suspected / Confirmed nCoV



Obs service: (Week 6) Provide antenatal visit to women in quarantine camp

- Background:
 - 14 pregnant women were kept in Wuhan & HK Government arranged them back to HK on March 4th
 - 8 women were booked in HA OBS unit and gestation 25 36 week 6 days
 - Other 6 women only 4-18 weeks and not yet booked
 - No antenatal check up for at least past 6 weeks & would be kept in Quarantine camp for another 2 weeks
 - Quarantine camp was close to our hospital
- Worked with HA, my hospital admin, and all Chief of Services of OBS units in H.K.
- → Provide one antenatal visit to the 8 women
 - Reduce the risk of unscheduled admission to A&E and Obs ward for "emergency obs problem"
 - Reduced repeated logistics arrangement between DH and few OBS units

Antenatal Visit for Pregnant Women from Hubei



respective hospital

Supporting team to clean environment

after the use

appointment

Obstetric services forward

- Liaising with doctors & midwives to restart husband accompany delivery
- First start with only at 2nd stage of labour
- →Resume during whole labour (may take a longer period for midwives to accept)

Gynaecology teams: Elective Operation

- Reduce elective cases
 - Avoid crowding and reduce risk of cross infection in Gyn ward
 - Conserve PPE and N95 consumption in Operation Theatre
 - Intubation and extubation for GA procedures: aerosol generating procedures that need PPE
- Elective gynaecological operations
 - For week 1-3: reserve for malignancy cases + patients with more severe gyn conditions
 - About 50% of non-malignant cases requested for postpone
 - For week 4-7: reserve for malignancy cases + life-saving conditions only
 - Due to hospital policy to conserve PPE for most high risk area
 - Only ~40% of cases continue operation
 - For week 8 onwards: After liaise with HCE and Q&S:
 - Will add cases who are fit and agree for regional anaesthesia

Gynaecology teams: Emergency Operation

- Try to reduce emergency surgery for evacuation of uterus for miscarriage / incomplete miscarriage
 - Try medical treatment first
 - If fails, promote surgical treatment under regional anaesthesia

Gynaecology: other services

To align with hospital policy on conserving PPE, avoid crowding, enhance efficiency

- Reviewed default rate of some services in the first 2 weeks
 - E.g. 50% in urodynamics clinics, 50% in one-stop clinic for post-menopausal bleeding
 - Combined 2 urodynamics clinics to 1 session / week → will resume normal from week 8
 - Combined 3 PMB clinic sessions to 2 sessions / week
- Reviewed priority of services
 - Colposcopy services for LSIL is regarded as lower priority, compared with services for HSIL
 - Only arrange colposcopy for HSIL cases and postpone others to few months later

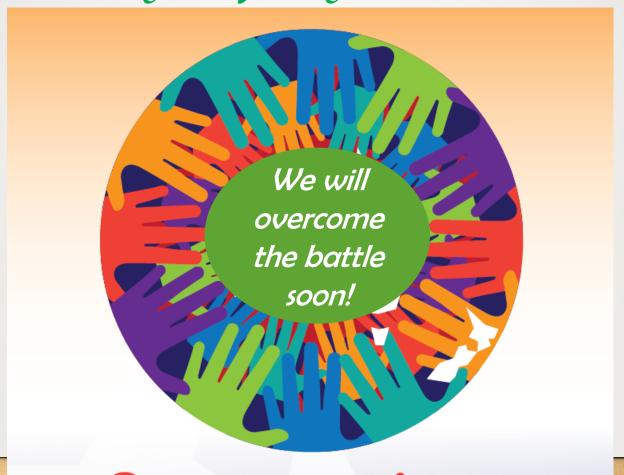
Staff

- Shortened the working hours of staff taking residential calls
 - 2 first call and one second call doctors
 - → More rest, reduce crowding, reduce risk of cross infection



- Remind them the latest travel alert level
- Respond to their concerns promptly
- Reserved staff quarters for them if they managed high risk cases

Thank you for your attention



Connections