



ORGANISING A PRIMARY CARE CLINIC IN A PANDEMIC

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SMA

ORGANISING A PRIMARY CARE CLINIC IN A PANDEMIC

- MOH Circular 35/2009 dated 30 April 2009
 - DORSCON ORANGE
 - (Disease Outbreak Response Systems Condition)
 - Healthcare workers
 - twice daily Temp recording
 - Risk level - Medium high – close contact with patients
 - hand hygiene, N95 masks, Gloves, Gowns, eye protection (i.e. FULL PPE)

Table - PPE FOR HCWs IN DORSCON ORANGE/RED/BLACK

Risk Level	Nature of Role of HCWs Working in the Healthcare Environment	Healthcare Environment	Hand Hygiene	Masks	Gloves	Gown	Eye Protection
Medium	People who, due to the nature of their job, may be unable to maintain >1m contact distance from another person	Offices with no patient contact, Tea rooms in wards	Yes	Surgical			
Medium-High	People who, due to the nature of their job, cannot maintain at least >1m contact distance from patients	PHC and SOC triage and clinics, Non-Isolation Wards, Ambulance, Pharmacies, Operating Theatres	Yes	N95	Yes, if direct contact with blood & body fluids	Yes, if direct contact with blood & body fluids	Yes If splashes likely &/or doing aerosol generating procedures

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BASIC PRINCIPLES

- Focus on reducing the risk of cross transmission of pathogens within the clinic.
- Patients and staff need to be protected and it is necessary to adopt stringent infection control practices
 - i.e. use of PPEs,
 - modifying the clinic workflow and work processes to effectively segregate the flu from non-flu patients.
- Scheduling of clinic hours for flu and non-flu cases is recommended to further segregate patients especially for clinics that do not have separate consult rooms.

Functional Areas

- **Screening Counter**- acts as a triage point for incoming patients and staff. It is located near the clinic's entrance
- **Waiting (Holding) Areas**- waiting area should be segregated into two distinct areas to ensure a physical separation of flu from non-flu patients.
 - If space is a constraint, clinics could explore setting up one or both the waiting areas outside the clinic but prior approval would likely be needed from HDB or the building management.
 - Provide biohazard waste bins for patients' use..
- **Registration Counter** - The counter will need a computer with internet access to enable the staff to access the Health Check System to identify repeat patients
- **Consultation Room(s)** - preferably 2 rooms segregated for flu and non-flu
 - Clinics with only one consult room should consider separate clinic hours for flu and non-flu patients
- **Transfer Room/Area**- enable flu patients to wait for transfer to designated flu hospitals. This area to be kept away from the other patients
- **Dispensary** and Payment Counter

Flu Screening Process

- The Screening Counter will screen all patients and staff entering the clinic for flu-like symptoms. Other visitors to the clinic (including delivery, dispatch personnel) should be managed outside the clinic. The staff assigned to the Screening Counter will have the following roles:
 - Don full PPE
 - Check body temperature of all visitors prior to entry into the clinic.
 - Screening Record which will include contact information for community contact tracing purposes
 - Screen every patient for flu-like symptoms.
 - Provide all patients with a surgical mask and advice on its use

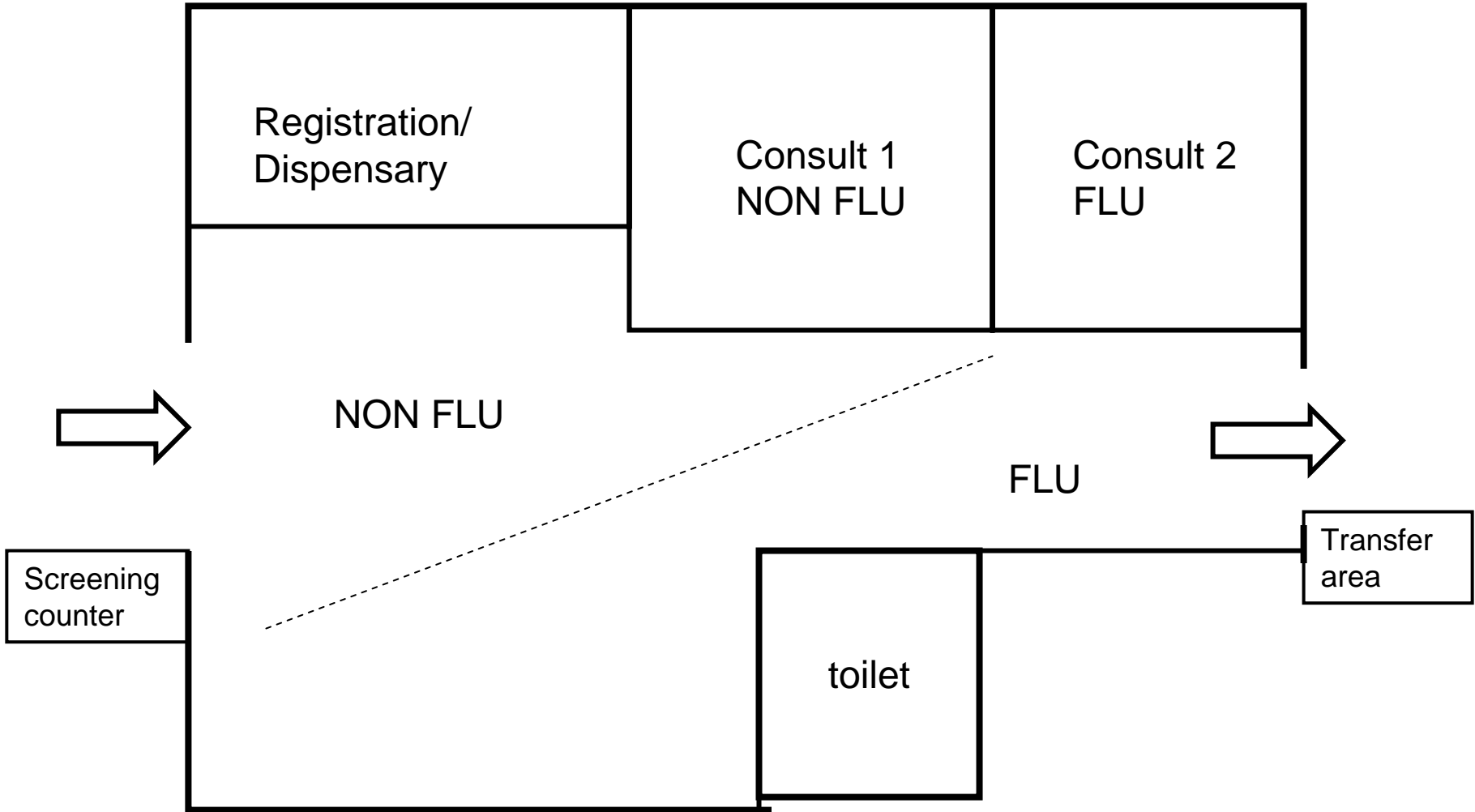
Consultation Process

Flu patients to be physically segregated from non-flu patient.

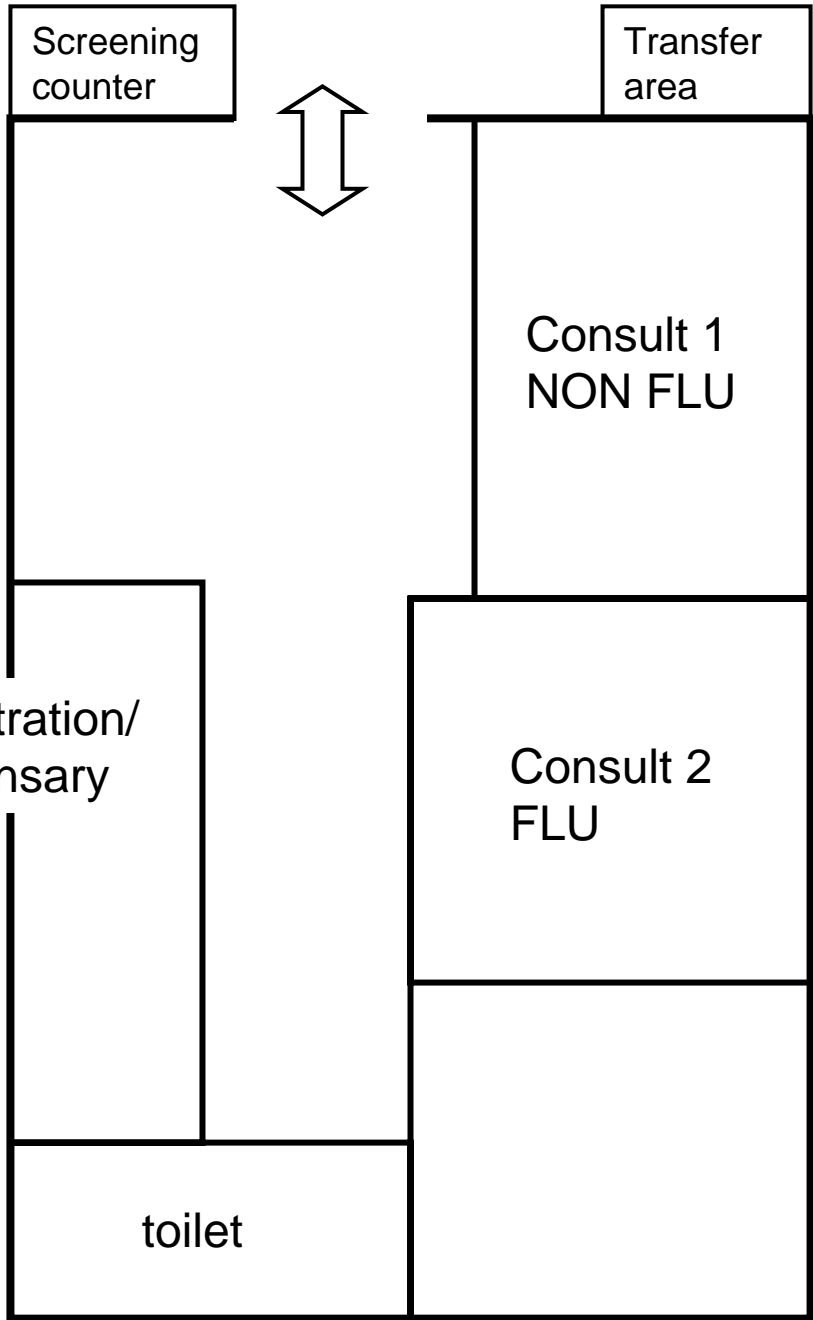
- Clinics with 1 consultation room - need to take greater care to reduce the possibility of cross infection. These clinics are strongly encouraged to reschedule their consultations for flu and non-flu patients.
- 2 or more Consultation Rooms - rooms should be designated for flu and non-flu patients. If the clinic has two (or more) doctors, then each doctor can be designated to a fixed consultation room.
- If there is only one doctor, he/she will need to shuttle between the two consultation rooms.
- Attending doctors and nurses need to put on full PPE and adopt the necessary infection control measures.

Entrances

- **Clinic Entry and Exit.** For clinics with two access points (e.g. main entrance and back door), the entrance and exit route should be separated



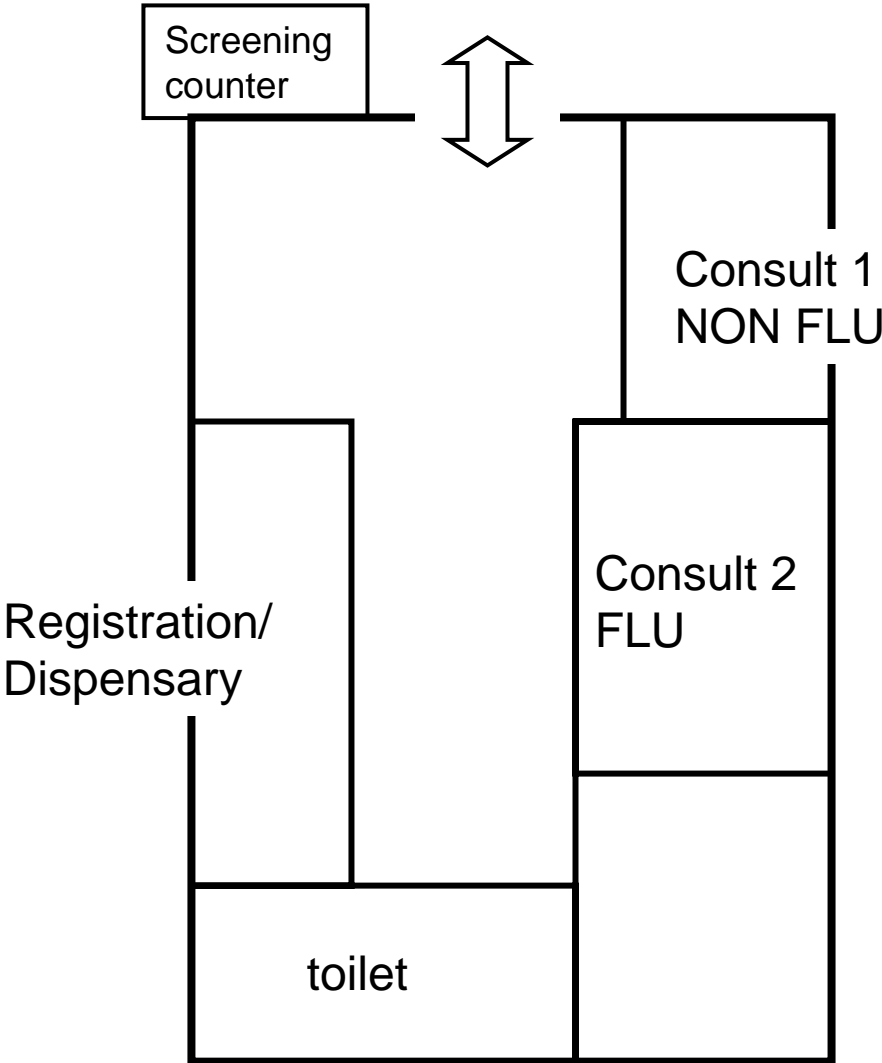
FLU - mornings
NON FLU - afternoons

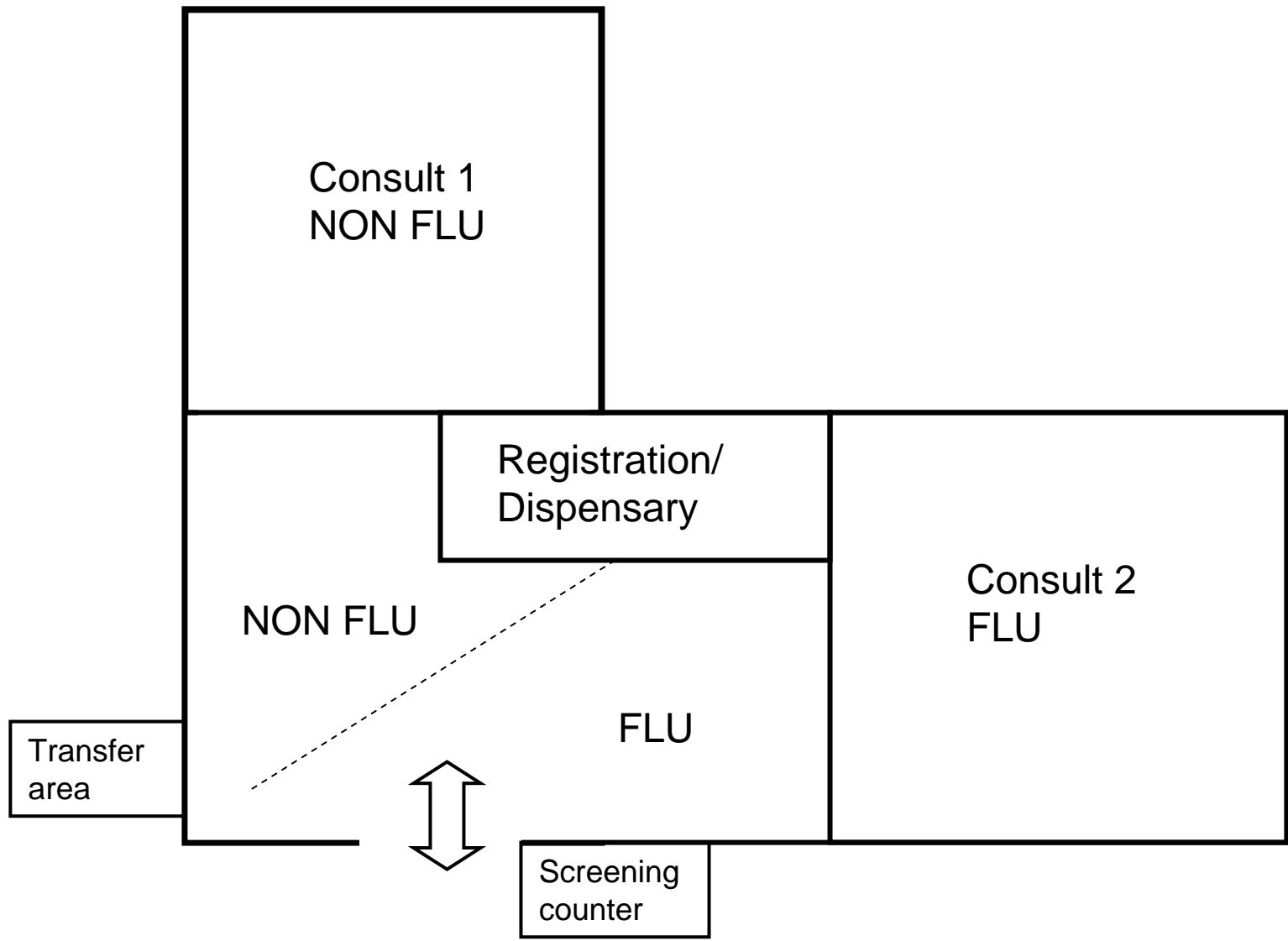


NON FLU

FLU

Transfer
area





PPE

- Primary care clinics are required to stockpile 1 week supply of PPE to meet their immediate DORSCON RED surge demand before the PPE from the national stockpile is delivered.
- When activated by MOH, each clinic will receive 6 weeks worth of PPE for staff use.
 - Planning ratio of up to 4 clinic support staff for every attending doctor.

PPE guideline

- **Gloves** - to be removed promptly after use, and worn before attending to another patient.
- **N95 Masks** must be worn during close contact with patients. A surgical mask would suffice for low risk settings.
- **Gowns** - A soiled gown should be removed as promptly as possible, Gowns need only be changed when soiled.



Planning Considerations

- Assumptions
 - 1 N95 mask per session Am + PM +/- night
 - 2 gowns per doc per day, 1 per CA
 - 1 pair gloves for every 2 patients
 - 1 surgical mask per patient with fever/ flu, assume every third or fourth patient has flu like illness

Logistics and Manpower

Doctors

Code	NAME OF DOCTOR	LOCATION	SHIFT	SESSIONS/ Day	SESSIONS/ Wk
DR1	Dr Andrew Ang	Consult 1	AM / PM	1	6
DR2	Dr Betty Beh	Consult 2	AM / PM	1	6
DR3	Dr Calvin Chan	Consult 1	Nights	1	5

Logistics and Manpower

Clinic Assistants/ staff

Code	NAME OF CLINIC ASST	LOCATION	SHIFT	SESSIONS/ Day	SESSIONS/ Wk
A	Andrea (5 days a week)	Screening	AM / PM	1	5
B	Betty (5 days a week)	Registration	AM / PM	1	5
C	Cecilia (4 days a week)	Registration	AM / PM	1	4
D	Doreen (4 days a week)	Screening	AM / PM	1	4
E	Elaine	Screening	Nights	1	5
F	Fion	Registration	Nights	1	5

Logistics and Manpower

PPE

STAFF (by code)	N95 / DAY	N95 / WEEK	GOWNS / DAY	GOWNS / WEEK	GLOVES/ DAY (pairs)	GLOVES/ Wk (pairs)
DR1	1	6	2	12	20	120
DR2	1	6	2	12	20	120
DR3	1	5	1	5	15	75
A	1	5	1	5	10	50
B	1	5	1	5	5	25
C	1	4	1	4	5	20
D	1	4	1	4	10	40
E	1	5	1	5	10	50
F	1	5	1	5	5	25
	TOTAL WEEKLY	45	TOTAL WEEKLY	57	TOTAL WEEKLY	525

Summary

- PPE requirements for a **2 doctor** practice for ONE WEEK
- (Hours : Mon – Sun AM, PM
- Mon – Fri AM, PM, night)
 - N95 masks = 45 = 2.5 boxes of 20s
 - Gowns = 57 = 6 packs of 10s
 - Gloves = 1050 = 10 boxes of 100s
 - Surgical masks = $\frac{1}{4}$ of 80 to 100 patients a day = 25 a day = 175 a week = 4 boxes of 50s

Summary

- PPE requirements for a **1 doctor** practice for ONE WEEK
- 7 mornings a week 4 nights, 1 doc per session, 4 CAs, 50 patients a day
 - N95 masks = 25 = 1.5 boxes of 20s
 - Gowns = 28 = 3 packs of 10s
 - Gloves = 700 = 7 boxes of 100s
 - Surgical masks = $\frac{1}{4}$ of 50 patients a day = 13 a day = 91 a week = 2 boxes of 50s



Infection Control Measures and Disinfection of Clinic Environment

Standard Precautions

- Standard Precautions apply to
 - blood,
 - all body fluids and secretions,
 - excretions except sweat, regardless of whether they contain visible blood,
 - non-intact skin and mucous membranes.
- Standard Precautions emphasizes the importance of hand washing after touching these potential sources of infection, after the removal of gloves, and between patient contact.

- Standard Precautions include:
 - Hand Hygiene
 - Gloves
 - Mask
 - Eye protection
 - Gown

CLEANING GUIDELINES FOR HEALTHCARE FACILITIES

- While large droplet spread is the most common mode of influenza transmission, aerosol spread and transmission through fomites and gross environmental contamination is possible.

GENERAL CLEANING PRINCIPLES

- reduce the level of contamination and minimise transmission of infection by *indirect contact* with surfaces contaminated with droplets.
- Disinfectant should be applied using a damp cloth, rinsed with water, and then dried.
 - Avoid spray pack – create aerosols and coverage is uncertain
 - Avoid splashing liquid- creation of aerosols

- 1% Sodium Hypochlorite (diluted bleach*) should be left for at least 10 minutes but no longer than 30 minutes, thoroughly rinsed off and the area dried.
 - (*Household bleaches are generally 3-6% sodium hypochlorite).
- All surfaces must be dried after they have been cleaned and rinsed, as damp surfaces attract contaminants

HEALTH CARE FACILITIES

- Cleaning staff should wear PPE and minimize the risk of transmission of infection whilst cleaning.
- 1% Sodium hypochlorite solution (e.g. diluted bleach) should be used on surfaces after general cleaning procedures for environmental disinfection.
- All surfaces close to the patient are likely to be heavily contaminated



USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE) WHEN CLEANING

- Gloves should always be worn when cleaning.
- Full PPE is not required for routine cleaning.
- Cleaning an environment where a known influenza case has been should involve the use of gloves, disposable gown, an N95 mask, and goggles.
- Single use (disposable) gloves should not be reused or washed.



Thank you