USEFUL INFORMATION 1
CDC INFECTION PREVENTION SUMMARY FOR OUTPATIENT SETTINGS: Minimum Expectations for Safe Care

Acknowledgments. Thanks are due to CDC USA for the use of the source document:
http://www.cdc.gov/HAI/pdfs/guidelines/Outpatient-Care-Guide-withChecklist.pdf

INTRODUCTION

This summary guide is based primarily upon elements of Standard Precautions and represents the minimum infection prevention expectations for safe care in ambulatory care settings.

DEDICATE RESOURCES TO INFECTION PREVENTION (ADMINISTRATIVE MEASURES)

1. Develop and maintain infection prevention and occupational health programs
2. Assure sufficient and appropriate supplies necessary for adherence to Standard Precautions (e.g., hand hygiene products, personal protective equipment, injection equipment)
3. Assure at least one individual with training in infection prevention is employed by or regularly available to the facility
4. Develop written infection prevention policies and procedures appropriate for the services provided by the facility and based upon evidence-based guidelines, regulations, or standards

EDUCATE AND TRAIN HEALTHCARE PERSONNEL

1. Provide job- or task-specific infection prevention education and training to all HCP -- This includes those employed by outside agencies and available by contract or on a volunteer basis to the facility
2. Training should focus on principles of both HCP safety and patient safety
3. Training should be provided upon orientation and repeated regularly (e.g., annually)
4. Competencies should be documented initially and repeatedly, as appropriate for the specific HCP positions

MONITOR AND REPORT HEALTHCARE ASSOCIATED INFECTIONS

1. Adhere to local, state, and federal requirements regarding HAI surveillance, reportable diseases, and outbreak reporting
2. Perform regular audits and competency evaluations of HCP adherence to infection prevention practices

ADHERE TO STANDARD PRECAUTIONS

Hand hygiene

1. Key situations where hand hygiene should be performed include:
   a. Before touching a patient, even if gloves will be worn
   b. Before exiting the patient's care area after touching the patient or the patient's immediate environment
   c. After contact with blood, body fluids or excretions, or wound dressings
   d. Prior to performing an aseptic task (e.g., placing an IV, preparing an injection)
   e. If hands will be moving from a contaminated-body site to a clean-body site during patient care
   f. After glove removal
2. Use soap and water when hands are visibly soiled (e.g., blood, body fluids), or after caring for patients with known or suspected infectious diarrhea (e.g., Clostridium difficile, norovirus). Otherwise, the preferred method of hand decontamination is with an alcohol-based hand rub.

Personal protective equipment

1. Facilities should assure that sufficient and appropriate PPE is available and readily accessible to HCP
2. Educate all HCP on proper selection and useof PPE
3. Remove and discard PPE before leaving the patient's room or area
4. Wear gloves for potential contact with blood, body fluids, mucous membranes, non-intact skin or contaminated equipment
   a. Do not wear the same pair of gloves for the care of more than one patient
   b. Do not wash gloves for the purpose of reuse
   c. Perform hand hygiene immediately after removing gloves
5. Wear a gown to protect skin and clothing during procedures or activities where contact with blood or body fluids is anticipated
   a. Do not wear the same gown for the care of more than one patient
6. Wear mouth, nose and eye protection during procedures that are likely to generate splashes or sprays of blood or other body fluids.
7. Wear a surgical mask when placing a catheter or injecting material into epidural or subdural space

Injection safety

1. Use aseptic technique when preparing and administering medications
2. Cleanse the access diaphragms of medication vials with 70% alcohol before inserting a device into the vial
3. Never administer medications from the same syringe to multiple patients, even if the needle is changed or the injection is administered through an intervening length of intravenous tubing
4. Do not reuse a syringe to enter a medication vial or solution
5. Do not administer medications from single-dose or single-use vials, ampoules, or bags or bottles of intravenous solution to more than one patient
6. Do not use fluid infusion or administration sets (e.g., intravenous tubing) for more than one patient
7. Dedicate multidose vials to a single patient whenever possible. If multidose vials will be used for more than one patient, they should be restricted to a centralized medication area and should not enter the immediate patient treatment area (e.g., operating room, patient room/cubicle)
8. Dispose of used syringes and needles at the point of use in a sharps container that is closable, puncture-resistant, and leak-proof.
9. Adhere to federal and state requirements for protection of HCP from exposure to bloodborne pathogens.

Environmental cleaning

1. Establish policies and procedures for routine cleaning and disinfection of environmental surfaces in ambulatory care settings
   a. Focus on those surfaces in proximity to the patient and those that are frequently touched
2. Select EPA-registered disinfectants or detergents/disinfectants with label claims for use in healthcare
3. Follow manufacturer's recommendations for use of cleaners and EPA-registered disinfectants (e.g., amount, dilution, contact time, safe use, and disposal)

Medical equipment

1. Facilities should ensure that reusable medical equipment (e.g., blood glucose meters and other point-of-care devices, surgical instruments, endoscopes) is cleaned and reprocessed appropriately prior to use on another patient
2. Reusable medical equipment must be cleaned and reprocessed (disinfection or sterilization) and maintained according to the manufacturer's instructions. If the manufacturer does not provide such instructions, the device may not be suitable for multi-patient use
3. Assign responsibilities for reprocessing of medical equipment to HCP with appropriate training
   a. Maintain copies of the manufacturer's instructions for reprocessing of equipment in use at the facility; post instructions at locations where reprocessing is performed
   b. Observe procedures to document competencies of HCP responsible for equipment reprocessing upon assignment of those duties, whenever new equipment is introduced, and on an ongoing periodic basis (e.g., quarterly)
4. Assure HCP have access to and wear appropriate PPE when handling and reprocessing contaminated patient equipment

Respiratory hygiene /Cough etiquette

1. Implement measures to contain respiratory secretions in patients and accompanying individuals who have signs and symptoms of a respiratory infection, beginning at point of entry to the facility and continuing throughout the duration of the visit.
   a. Post signs at entrances with instructions to patients with symptoms of respiratory infection to:
      i. Cover their mouths/noses when coughing or sneezing
      ii. Use and dispose of tissues
      iii. Perform hand hygiene after hands have been in contact with respiratory secretions
      b. Provide tissues and no-touch receptacles for disposal of tissues
   c. Provide resources for performing hand hygiene in or near waiting areas
   d. Offer masks to coughing patients and other symptomatic persons upon entry to the facility
   e. Provide space and encourage persons with symptoms of respiratory infections to sit as far away from others as possible. If available, facilities may wish to place these patients in a separate area while waiting for care
2. Educate HCP on the importance of infection prevention measures to contain respiratory secretions to prevent the spread of respiratory pathogens when examining and caring for patients with signs and symptoms of a respiratory infection.

SOURCE DOCUMENTS

All guidelines are available at: http://www.cdc.gov/HAI/prevent/prevent_pubs.html

USEFUL INFORMATION 2
PANDEMIC INFLUENZA PREPAREDNESS

Acknowledgments. Thanks are due to Ministry of Health, Singapore for the use of the source materials.

<table>
<tr><th colspan="5">ADVICE TO PUBLIC -- DORSCON ALERT LEVELS – Nature of disease, Impact on daily life, and community response required</th></tr>
<tr><td></td><td>GREEN</td><td>YELLOW</td><td>ORANGE</td><td>RED</td></tr>
<tr><td>Nature of disease</td><td>MILD OR SEVERE BUT DOES NOT SPREAD EASILY (e.g. MERS, H7N9)</td><td>SEVERE, SPREADING EASILY BUT OUTSIDE SINGAPORE OR TYPICALLY MILD*, SPREADING IN SINGAPORE
* could be severe in vulnerable groups</td><td>SEVERE, SPREADING EASILY BUT CONTAINED (e.g. SARS)</td><td>SEVERE & SPREADING WIDELY</td></tr>
<tr><td>Impact on Daily Life</td><td>NO DISRUPTION</td><td>MINIMAL DISRUPTION
• Border screening
• Increased absenteeism</td><td>MODERATE DISRUPTION
• Temperature screenings
• Quarantine, Visitor Restrictions</td><td>MAJOR DISRUPTION
• School closures, Work-from-home orders
• Significant numbers of deaths</td></tr>
<tr><td rowspan="4">Advice to public</td><td colspan="4">MAINTAIN GOOD PERSONAL HYGIENE: Keep good hygiene habits
BE SOCIALLY RESPONSIBLE: Stay at home when unwell</td></tr>
<tr><td></td><td colspan="3">Look out for health advisories</td></tr>
<tr><td></td><td></td><td colspan="2">Comply with control measures</td></tr>
<tr><td></td><td></td><td></td><td>Practise social distancing: avoid crowded areas</td></tr>
<tr><td colspan="5">Source: MOH Pandemic Preparedness Page – DORSON Poster – CCD (Accessed 2013 Oct 30) – adapted</td></tr>
</table>

SOURCE: Guide to Organising a Primary Care Clinic During an Influenza Clinic. Version 3 (Nov 2013): Annex B

SUMMARY TABLE 1 – RESPONSE MEASURES UNDER THE DORSCON MATRIX					
Possible scenarios	**Applicable epidemic phases**	**Border Control**	**Public health measures – cont'd in next page**		
			Temperature screening at non-healthcare settings	**Social distancing**	**School closures**
GREEN - Negligible to low public health impact					
• **High virulence** • **No or limited H-H transmission** • **Disease mainly overseas**	Alert	Health Advisory Notices (HANs) (Posters, Cards)	No	No	No
• **Similar or lower virulence and transmissibility as seasonal flu**	Mitigation	No	Consider to implement depending on risk		
YELLOW					
• **High virulence but low transmission** • **Disease mainly overseas**	Alert	HANs Consider Health Declaration Cards (HDCs) and temperature screening of inbound passengers	No	No	No
• **Local epidemic with low virulence but high transmissibility**	Mitigation	HANs	Consider to implement depending on risk		
• **High virulence and transmissibility, but vaccine available**	Mitigation		No		
ORANGE					
• **High virulence and transmissibility** • **Disease mainly overseas**	Alert	HANs Consider HDCs and temperature screening of inbound passengers	No	No	No
• **High virulence and transmissibility** • **Disease in Singapore**	Containment		Consider to implement depending on risk	Consider to implement depending on risk	Yes, selective closures if cases or clusters are detected in schools
• **High virulence and transmissibility** • **More cases in Singapore**	Limited mitigation	HANs Consider temperature screening of all passengers			
RED					
• **High virulence and transmissibility** • **Widespread transmission**	Mitigation	Temperature screening of all passengers	Yes	Yes	Yes
Source: MOH Summary Tables under the DORSCON Matrix (2013 Oct 30)					

SOURCE: Guide to Organising a Primary Care Clinic During an Influenza Clinic. Version 3 (Nov 2013): Annex A

SUMMARY TABLE 1 cont'd – RESPONSE MEASURES UNDER THE DORSCON MATRIX				
Possible scenarios	**Public health measures – continuation of Table 1**			
	Contact tracing	**Phone surveillance or quarantine**	**Antivirals for influenza**	**Vaccination**
GREEN - Negligible to low public health impact				
• **High virulence** • **No or limited H-H transmission** • **Disease mainly overseas**	Yes, if cases are imported	Consider to implement either depending on risk	Treatment of case where necessary	No
• **Similar or lower virulence and transmissibility as seasonal flu**	No	No		Vaccination for high risk groups, if available
YELLOW				
• **High virulence but low transmission** • **Disease mainly overseas**	Yes, if cases are imported	Consider to implement either depending on risk	Treatment of cases where necessary	Procure and offer vaccine when available
• **Local epidemic with low virulence but high transmissibility**	No	No		
• **High virulence and transmissibility, but vaccine available**				
ORANGE				
• **High virulence and transmissibility** • **Disease mainly overseas**	Yes, if cases are imported	Quarantine	Treatment of cases where necessary	Procure and offer vaccine when available
• **High virulence and transmissibility** • **Disease in Singapore**	Yes, as far as operationally feasible	Quarantine, as far as operationally feasible		
• **High virulence and transmissibility** • **More cases in Singapore**	No	No		
RED				
• **High virulence and transmissibility** • **Widespread transmission**	No	No	Treatment of cases and prophylaxis of essential personnel	Procure and offer vaccine when available
Source: MOH Summary Tables under the DORSCON Matrix (2013 Oct 30)				

SOURCE: Guide to Organising a Primary Care Clinic During an Influenza Clinic. Version 3 (Nov 2013): Annex A cont'd

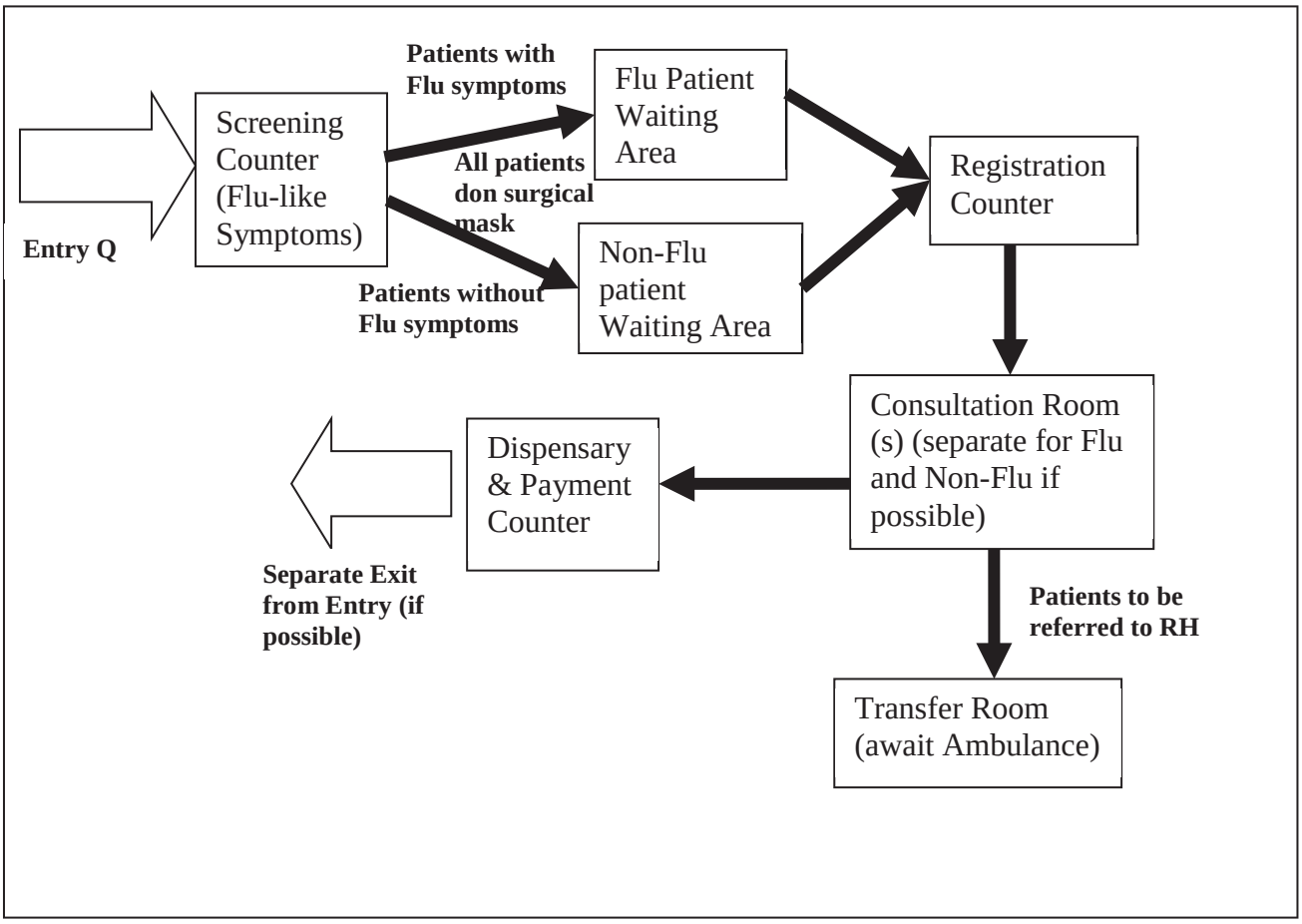
SUMMARY TABLE 2 – RESPONSE MEASURES UNDER THE DORSCON MATRIX					
Possible scenarios	**Applicable epidemic phases**	**Surveillance**	**Public health measures – cont'd in next page**		
			Monitoring of health of HCWs	**Infection control**	**Managing exposed HCWs without PPE**
GREEN - Negligible to low public health impact					
• **High virulence** • **No or limited H-H transmission** • **Disease mainly overseas**	Alert	Monitor disease situation	Track medical leave	Appropriate PPE for HCWs when attending to suspect and confirmed cases	Consider quarantine or prophylaxis depending on risk
• **Similar or lower virulence and transmissibility as seasonal flu**	Mitigation	Enhance community surveillance			Nil
YELLOW					
• **High virulence but low transmission** • **Disease mainly overseas**	Alert	Monitor disease situation	Track medical leave	Appropriate PPE for HCWs when attending to suspect and confirmed cases	Consider quarantine or prophylaxis depending on risk
• **Local epidemic with low virulence but high transmissibility**	Mitigation	Enhance community surveillance	Track medical leave and temp taking		Consider voluntary quarantine depending on risk
• **High virulence and transmissibility, but vaccine available**	Mitigation	Enhance community surveillance			
ORANGE					
• **High virulence and transmissibility** • **Disease mainly overseas**	Alert	Enhance hospital surveillance	Track medical leave and temp taking	Full PPE for all HCWs **at high risk**	Consider quarantine or prophylaxis depending on risk
• **High virulence and transmissibility** • **Disease in Singapore**	Containment	Enhance hospital surveillance			
• **High virulence and transmissibility** • **More cases in Singapore**	Limited mitigation	Enhance community surveillance			Consider voluntary quarantine depending on risk
RED					
• **High virulence and transmissibility** • **Widespread transmission**	Mitigation	Enhance community surveillance	Track medical leave and temp taking	Appropriate PPE for HCWs **at high risk**	Consider voluntary quarantine depending on risk
Source: MOH Summary Tables under the DORSCON Matrix (2013 Oct 30)					

SOURCE: Guide to Organising a Primary Care Clinic During an Influenza Clinic. Version 3 (Nov 2013): Annex A cont'd

SUMMARY TABLE 2 cont'd – RESPONSE MEASURES UNDER THE DORSCON MATRIX				
Possible scenarios	**Public health measures – continuation of Table 1**			
	Management of suspect cases	**Visitor control/ Temp screening**	**Isolate suspect and confirmed cases**	**Scale down elective procedures / inter-hospital transfer**
GREEN - Negligible to low public health impact				
• **High virulence** • **No or limited H-H transmission** • **Disease mainly overseas**	Refer to designated hospitals	Visitor registration	Yes	No
• **Similar or lower virulence and transmissibility as seasonal flu**	Nil		No	
YELLOW				
• **High virulence but low transmission** • **Disease mainly overseas**	Refer to designated hospitals	Visitor registration	Yes	No
• **Local epidemic with low virulence but high transmissibility**	Outpatient management at Pandemic Preparedness Clinics (PPCs), refer severe cases to hospitals PPCs to provide vaccination	Consider visitor restriction in affected hospitals, if necessary	Consider to implement depending on risk	Scale down elective procedures if necessary to cope with large number of cases
• **High virulence and transmissibility, but vaccine available**				
ORANGE				
• **High virulence and transmissibility** • **Disease mainly overseas**	Refer to designated hospitals	Visitor registration	Yes, as far as operationally feasible	No
• **High virulence and transmissibility** • **Disease in Singapore**		Consider visitor restriction in affected hospitals, if necessary, and temp screening for visitors to clinical areas		Scale down elective procedures in affected hospitals and restrict inter-hospital transfer
• **High virulence and transmissibility** • **More cases in Singapore**				
RED				
• **High virulence and transmissibility** • **Widespread transmission**	Outpatient management at Pandemic Preparedness Clinics (PPCs), refer severe cases to hospitals	Stop visitors, if necessary. Screening for visitors to all clinical areas	Yes, as far as operationally feasible	Scale down elective procedures and stop transfer of patients from RHs to ILTCs
Source: MOH Summary Tables under the DORSCON Matrix (2013 Oct 30)				

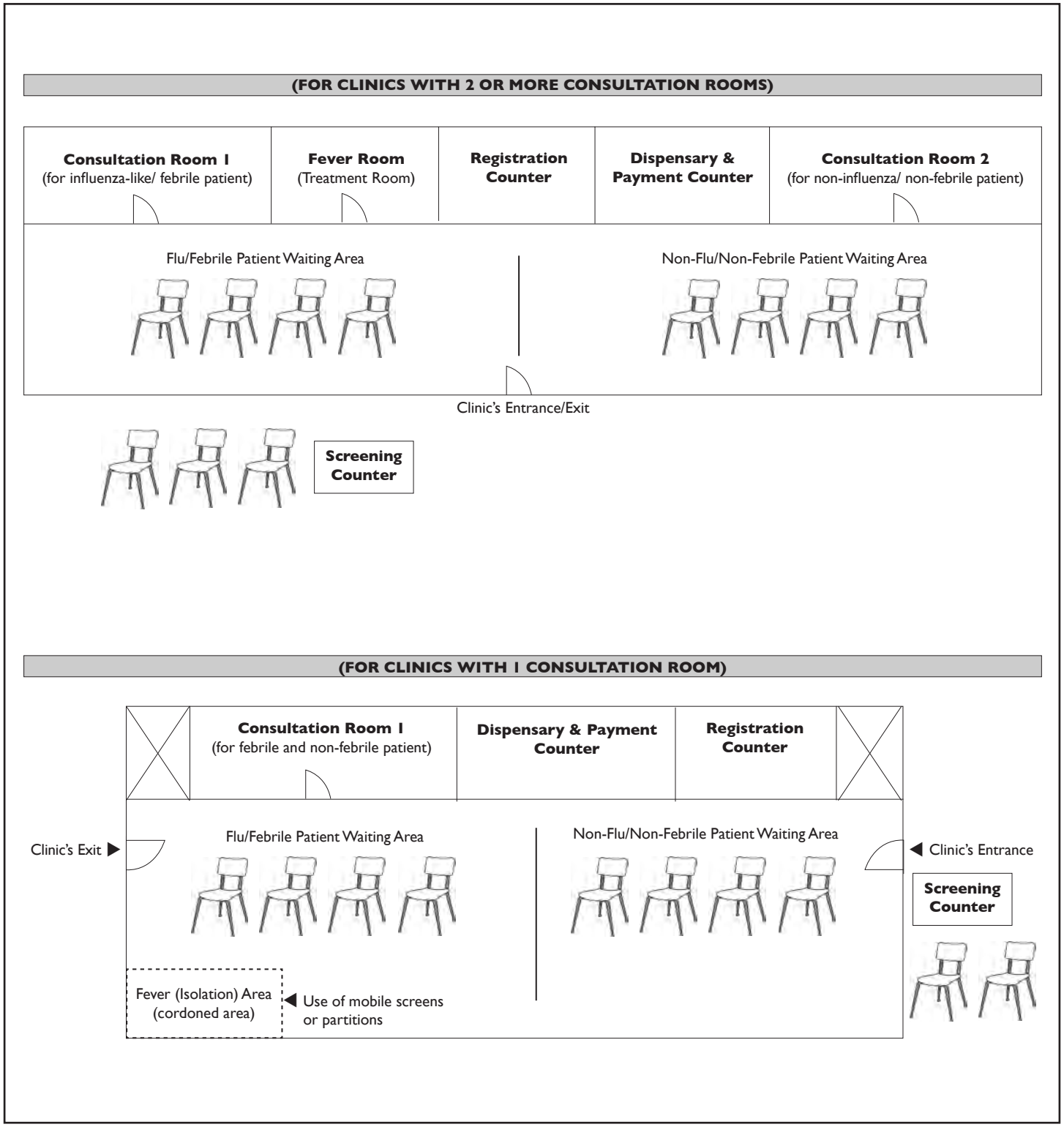
SOURCE: Guide to Organising a Primary Care Clinic During an Influenza Clinic. Version 3 (Nov 2013): Annex A cont'd

SCHEMATIC WORKFLOW FOR A PRIMARY CARE CLINIC



SOURCE: Guide to Organising a Primary Care Clinic During an Influenza Clinic. Version 3 (Nov 2013): Annex C

SCHEMATIC LAYOUT OF A CLINIC IN AN INFLUENZA PANDEMIC



SOURCE: Guide to Organising a Primary Care Clinic During an Influenza Clinic. Version 3 (Nov 2013): Annex C