



مركز القيادة و التحكم
Command & Control Center

Infectious Diseases (MERS-CoV & Ebola) Diversion Plans for Hajj

Last updated: 29/9/2014

Infectious Diseases (MERS-CoV and Ebola) Diversion Plans for Hajj

Purpose of this document

- Document clinical operations **protocols** that **must be followed** for **MERS-CoV and Ebola cases diversions** to appropriate facilities during the **1435 Hajj season**



Disclaimer for use of this document

This document:

- Focuses on protocols to follow during the **1435 Hajj season**
- Focuses on Hajj **related locations (Makkah, Madinah, Holy Sites, and Jeddah)** and does NOT cover protocols to follow in other regions in KSA
- Is **NOT intended as a comprehensive MERS-CoV and Ebola response guideline**
- Should be supplemented with **other important guidelines** such as infection prevention and control and isolation guidelines which are found **on the MOH website:**
 - **MERS-CoV readiness guideline :**
<http://www.moh.gov.sa/en/CCC/Regulations/Final-MERS-CoV%20IPC%20Guidelines-24.06.2014.pdf>
 - **Ebola readiness guideline:**
<http://www.moh.gov.sa/ layouts/FinalEVDIPCGuidelines08.08.2014.pdf>
- Is subject to **change** as guidelines are updated



Acknowledgments

This document was developed with

- Dr. Anees Sindi, Deputy Commander, Command and Control Center
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- Dr. Ahmad Wazzan, President, Saudi Arabian Society of Emergency Medicine
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**For any comments, clarifications,
or recommendations pertaining
to this document please email
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▪ Guiding principles

- Case definitions
- MERS-CoV and Ebola dedicated teams
- MERS-CoV diversion plans
- Ebola diversion plans
- Transfer protocols
- Home isolation protocols

General guiding principles to follow in handling MERS-CoV and Ebola cases (1 of 2)

The following principles were followed to create the referral pathways. They should be followed in case of doubt or when handling cases not specifically addressed in this guide:

General

- All hospital staff should be aware of latest MERS-CoV and Ebola **case definitions**¹ in addition to waste disposal in case of Ebola
- At all times, handle suspect patients with appropriate **protection equipment** (i.e. PPEs applied on patients and by health professionals) and follow all recommended IPC guidelines²
- When transferring patients to other locations, **transfer protocols**² should be followed
- For **other infectious diseases** not covered in this guideline, please follow standard MoH guidelines

1 Case definitions available on MoH websites: MERS-CoV: <http://www.moh.gov.sa/en/CCC/Regulations/Final-MERS-CoV%20IPC%20Guidelines-24.06.2014.pdf>, Ebola: http://www.moh.gov.sa/_layouts/FinalEVDIPCGuidelines08.08.2014.pdf

2 Transfer protocols available in this document

General guiding principles to follow in handling MERS-CoV and Ebola cases (2 of 2)

Suspected cases

- **MERS-CoV:** When possible (i.e. isolation room and adequate personal available), preference is to admitting suspect MERS-CoV patients in **same facility** that received patient rather than transferring patient to other ERs or MERS-CoV Designated Hospitals (MDH)
- **Ebola:** For Ebola suspect patients, call the infectious disease **hotline (937) to trigger Ebola team** to arrive to location and transfer the patient to the Ebola Designated Hospitals immediately

Confirmed cases

- **MERS-CoV:** Confirmed MERS-CoV patients should be transferred to MERS-CoV Designated Hospitals (MDH) following appropriate transfer protocols¹

¹ Transfer protocols available in this document

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MERS-CoV case definition

Suspect case (patients who should be tested for MERS-CoV)

- I. A person with **fever** and **community-acquired pneumonia** or acute **respiratory distress** syndrome based on clinical or radiological evidence
OR
- II. A **hospitalized** patient with **healthcare associated pneumonia** based on clinical and radiological evidence
OR
- III. A person with
 - 1) Acute **febrile ($\geq 38^{\circ}\text{C}$) illness**
AND
 - 2) Body **aches, headache, diarrhea, or nausea/vomiting**, with or without **respiratory symptoms**
AND
 - 3) Unexplained **leucopenia** ($\text{WBC} < 3.5 \times 10^9/\text{L}$) and **thrombocytopenia** ($\text{platelets} < 150 \times 10^9/\text{L}$)
- IV. A person (including health care workers) who had **protected** or **unprotected exposure** to a confirmed or probable case of MERS-CoV infection and who presents with **upper** or **lower respiratory illness** within 2 weeks after exposure

- A **probable case** is a patient in category I or II with absent or inconclusive laboratory results for MERS-CoV and other possible pathogens who is a **close contact** of a laboratory-confirmed MERS-CoV case or who **works in a hospital** where MERS-CoV cases are cared for
- A **confirmed case** is a person with laboratory confirmation of MERS-CoV infection

SOURCE: KSA MoH MERS-CoV Infection Prevention and Control Guidelines

<http://www.moh.gov.sa/en/CCC/Regulations/Final-MERS-CoV%20IPC%20Guidelines-24.06.2014.pdf>



Ebola case definition

Person Under Investigation (PUI)

- Illness in a person who has both consistent symptoms and risk factors as follows
 - Clinical criteria, which includes fever of greater than 38.6°C, and additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage (gingival, nasal, cutaneous [petechiae, bruises, ecchymosis], gastrointestinal, rectal [gross or occult blood], urinary [gross or microscopic hematuria], vaginal, or puncture sites bleeding); AND
 - Epidemiologic risk factors within the past 3 weeks before the onset of symptoms, such as contact with blood or other body fluids of a patient known to have or suspected to have EVD; residence in-or travel to-an area where EVD transmission is active; or direct handling of dead or alive fruit bats, monkeys, chimpanzees, gorillas, forest antelope and porcupines from disease-endemic areas. Malaria diagnostics should also be a part of initial testing because it is a common cause of febrile illness in persons with a travel history to the affected countries

Contacts of an EVD Case

- A suspected case with laboratory-confirmed diagnostic evidence of Ebola virus infection

SOURCE: KSA MoH Ebola Infection Prevention and Control Guidelines <http://www.moh.gov.sa/ layouts/FinalEVDIPCGuidelines08.08.2014.pdf>



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Dedicated teams, reachable through the 937 hotline, will be in place to assist in managing MERS-CoV and Ebola cases

Teams, reachable through the 937 hotline, who can help in diagnosing, handling, or transferring cases

MERS-CoV

- **MERS-CoV Team:** Intensivist (ICU consultant) and Infectious Diseases consultant on call that can help in diagnosing cases over the phone and advising on appropriate course of action to take
- **ECMO team:** Emergency team that responds when there is an ECMO need to insert ECMO and transfer the patient

Ebola

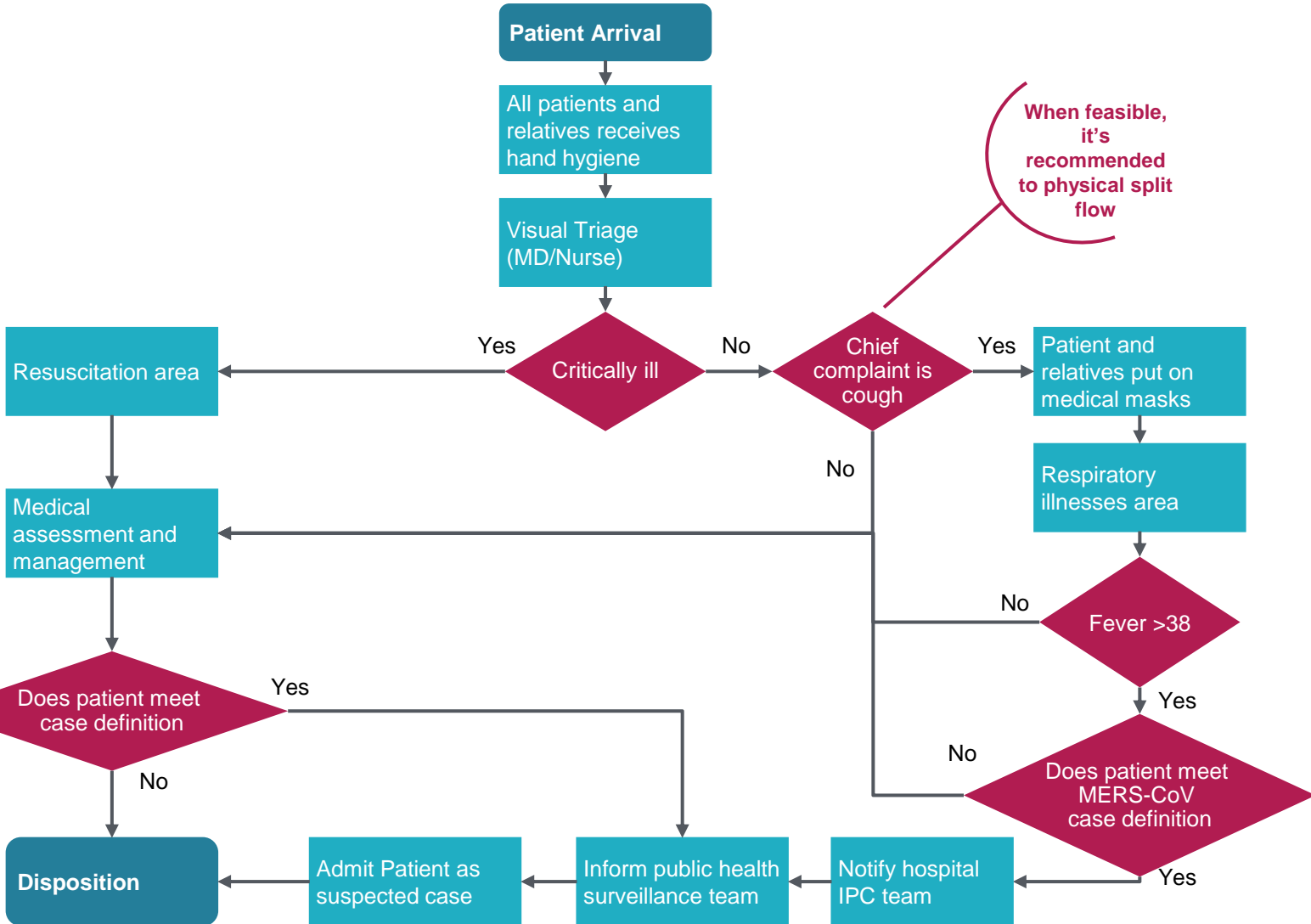
- **Ebola ID consultant:** On call infectious diseases consultant who can help in diagnosing cases over the phone and advising on course of action to take
- **Ebola transfer team:** Emergency team responsible for extracting and transferring suspected Ebola cases

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Identification of suspected MERS-CoV case at Hospitals and PHCs at Makkah, Holy Sites, Madinah, and Jeddah

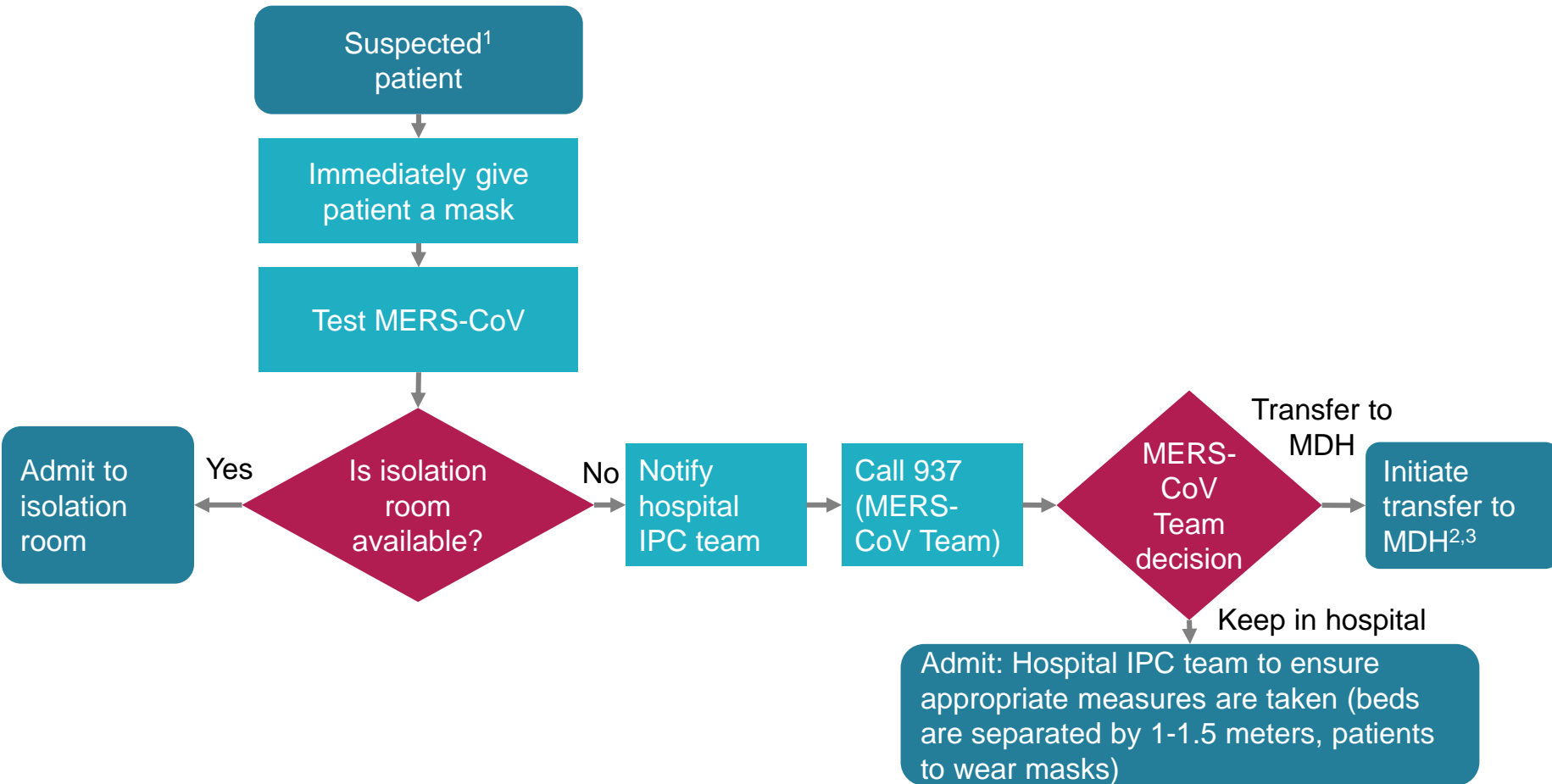


When feasible, it's recommended to physical split flow

In PHC, if a patient is suspected, transfer patient to nearest hospital. If patient is clinically stable and it's difficult to transport due to logistical challenges, apply mask and direct him/her to nearest hospital



Diversion plan for a suspect MERS-CoV (ICU and non-ICU) patient in Makkah, Madinah or Jeddah Hospitals

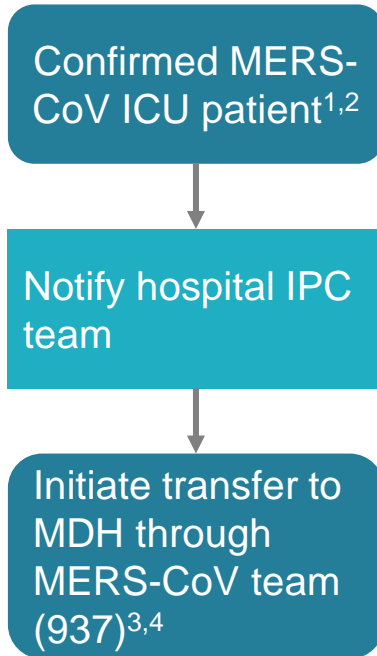


1 Refer to MERS-CoV case definition as per MoH's MERS-CoV online guideline <http://www.moh.gov.sa/en/CCC/Regulations/Final-MERS-CoV%20IPC%20Guidelines-24.06.2014.pdf>

2 Follow transfer from hospital protocol presented in this guide

3 List of MDHs presented in this guide

Diversion plan for a confirmed MERS-CoV (ICU and non-ICU) patient in Makkah, Madinah, Holy Sites, or Jeddah Hospitals



1 Refer to MERS-CoV case definition as per MoH's MERS-CoV online guideline <http://www.moh.gov.sa/en/CCC/Regulations/Final-MERS-CoV%20IPC%20Guidelines-24.06.2014.pdf>

2 Follow protocol for confirming +ve MERS-CoV case

3 Follow transfer from hospital protocol

4 937 has latest list of MDH hospitals

Special note regarding allowing **suspect or confirmed MERS-CoV cases** to participate in the **Hajj caravan** on the day of Arafa

On the day of Arafa, confirmed/suspect MERS-CoV patients can join the Hajj Caravan bus (if they are fit to do so). The following precautions are to be followed:

- Patients are to be seated 1 to 1.5 meters apart
- Patients are to wear surgical masks, keep on changing the masks when they get wet
- Patients are not allowed to leave the bus


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Ports of Entry: Documents to complete - Screening card

Health Screening Card
(Fiche de dépistage sanitaire)


وزارة الصحة
Ministry of Health

Name (Nom): _____
Passport Number (Numéro de passeport): _____

Nationality (Nationalité): _____ Flight Number (Numéro du vol): _____
Airline (Compagnie aérienne): _____ Date of arrival (Date d'arrivée): ____/____/____

Have you visited any of the following African countries during the last twenty one (21) days?
(Avez-vous visité un des pays africains suivants au cours des vingt et un (21) derniers jours ?) Other African countries (Autres pays Africains)

Sierra Leone (Sierra Leone) Guinea (Guinée) Liberia (Libéria) Nigeria (Nigeria) Kenya (Kenya) D.R. of Congo (R. de Congo)

Have you come in contact with any Ebola patients during the last twenty one (21) days?
(Avez-vous été en contact avec des patients atteints du virus Ebola au cours des vingt et un (21) derniers jours ?)

Yes (Oui) No (Non)

Have you suffered from any of the following symptoms during the last seven (7) days?
(Avez-vous souffert d'un des symptômes suivants au cours des sept (7) derniers jours ?)

<input type="checkbox"/> Fever (Fièvre)	<input type="checkbox"/> Headache (Mal de tête)	<input type="checkbox"/> Nausea or vomiting (Nausée ou vomissements)
<input type="checkbox"/> Lack of appetite (Manque d'appétit)	<input type="checkbox"/> Stomach pain (Mal de ventre)	<input type="checkbox"/> Diarrhea (Diarrhée)
<input type="checkbox"/> Bloody diarrhea (Diarrhée sanglante)	<input type="checkbox"/> Fatigue or weakness (Fatigue ou faiblesse)	<input type="checkbox"/> Joint and/or muscle aches (Douleurs articulaires et / ou musculaires)
<input type="checkbox"/> Sore throat (Mal de gorge)	<input type="checkbox"/> Shortness of breath (Souffle court)	<input type="checkbox"/> Bleeding from gums (Saignement des gencives)
<input type="checkbox"/> Bleeding from nose (Saignement du nez)	<input type="checkbox"/> Vomiting blood (Vomissements de sang)	<input type="checkbox"/> Rash (Eruption cutanée)
		<input type="checkbox"/> Dark urine (Urines foncées)

Key actions

- Screening card to be distributed to each individual entering the Kingdom at the gates
- Check card is filled in correctly
- Collect all filled in cards

Ports of Entry: Documents to complete: Contact Information Form

Kingdom of Saudi Arabia
Ministry of Health
Under-secretariat of Public Health

Contact Information Form
For Persons Exposed to Ebola Infection

Entry Port:

Date: / /1435 AH.

Name:

Passport No:..... Nationality:

Campaign Name: Departure Point:

Airline: Flight No:..... Seat No.....

Country Visited:Date of Visit.....

Duration of Stay..... Visit Reason:

Have you been in contact with Ebola Patient: Date of such contact:

Residence Address in the Kingdom.....

Contact Number in the Kingdom:

Contact Number of Reference Person in the Kingdom:

Symptoms Suffered (If any).....

.....

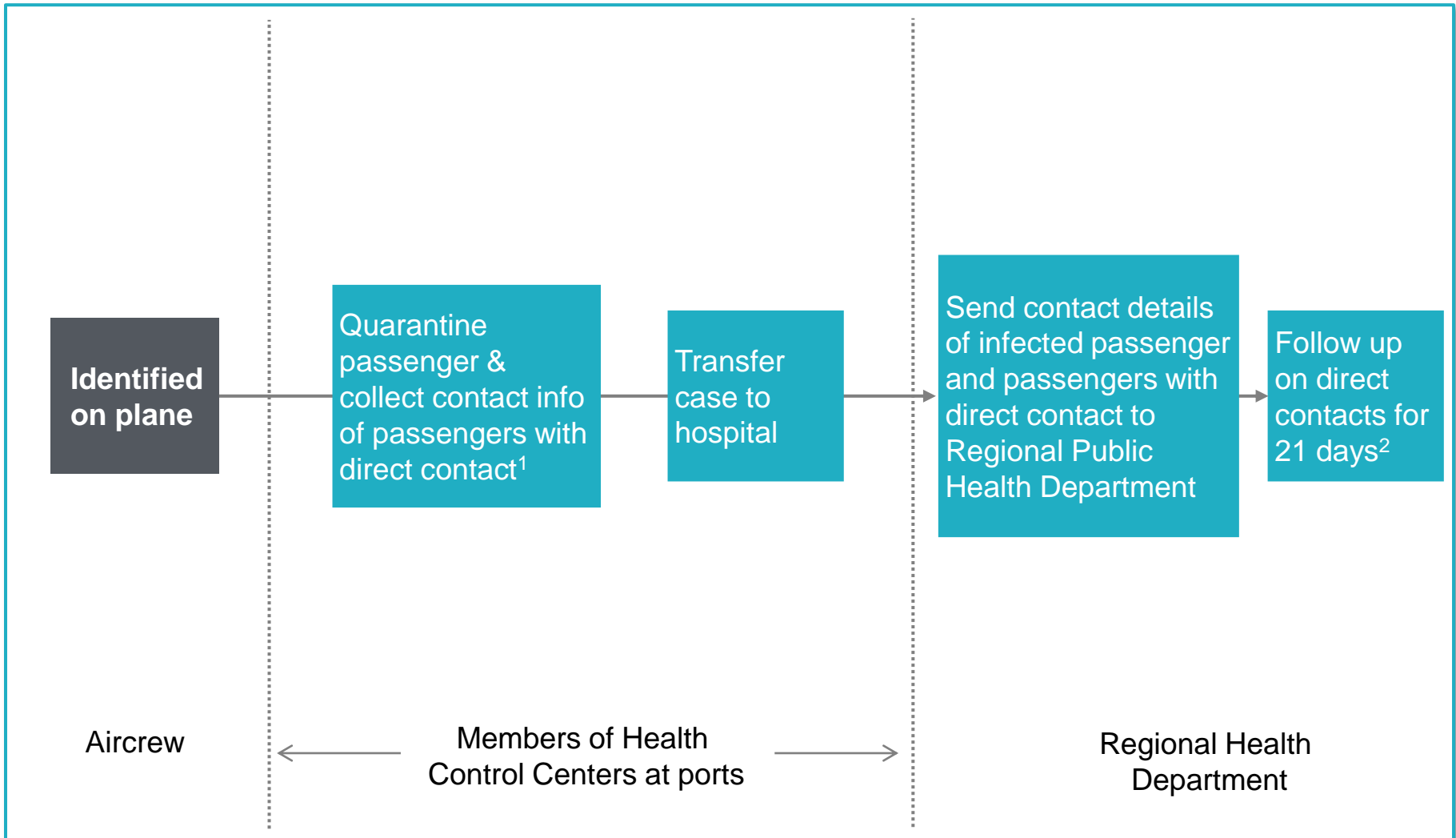
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Key actions

- Contact Information form to be filled in by passengers from 3 endemic countries and / or individuals who had contact with EVD case but did not display symptoms compatible with EVD
- To be sent to Regional Health Departments who will follow up with contact for 21 days¹

1 From expected exposure day

Ports of Entry: Process to follow in case a passenger with symptoms matching EVD was identified on board of an airplane



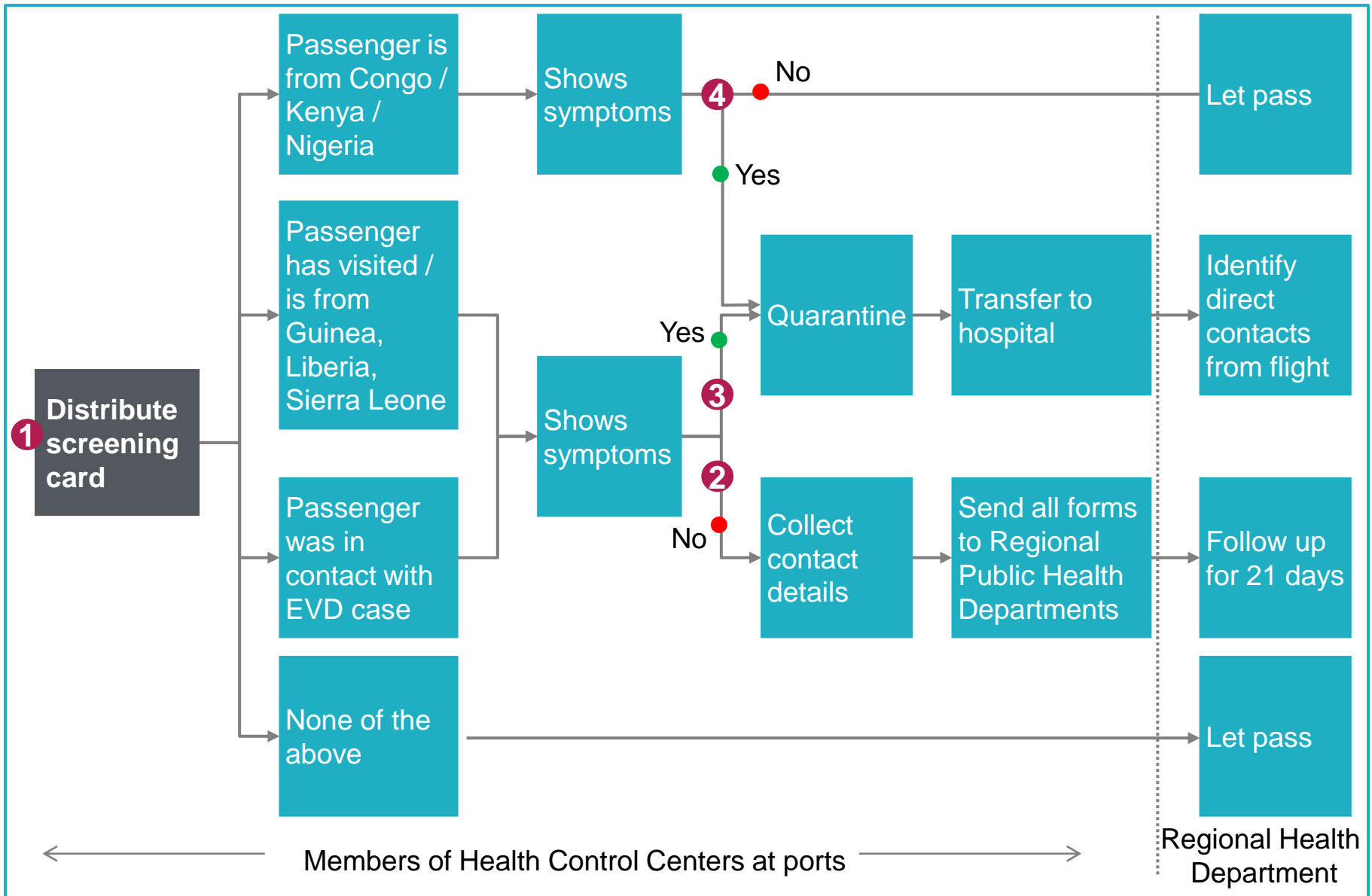
¹ Includes: aircrew and passengers who came in direct contact with suspected case, passengers with seats close by (one row in front / behind passenger, on an adjacent seat or across the aisle) and cleaners who cleaned area where suspected case was seated ² From expected exposure day

Ports of Entry: Key activities underlying process to follow in case a passenger with symptoms matching EVD was identified **on board of an airplane**

- Quarantine the patient immediately upon arrival
- Collect contact info of case and of direct / adjacent passengers (use *Contact Information Form for Persons Exposed to Ebola Infection*)
- Ensure cleaners cleaning the area on the plane where case was sitting wear PPE and are instructed on how to disinfect the area properly
- Notify Department of Public Health in the Region and transfer patient to any specialized hospital in the region with quarantine rooms
- Passengers and aircrew who were in direct / adjacent contact with the bodily fluids or infected tools of the patient will also be considered as exposed to the risk of EVD
- Send all forms to Regional Public Health Department; they will follow up on direct / adjacent passengers for 21¹ days (following the MoH *Ebola Prevention Guidelines for Medical Facilities*)

¹ From expected exposure day

Ports of Entry: Process to follow to identify an EVD case at entry gates upon arrival

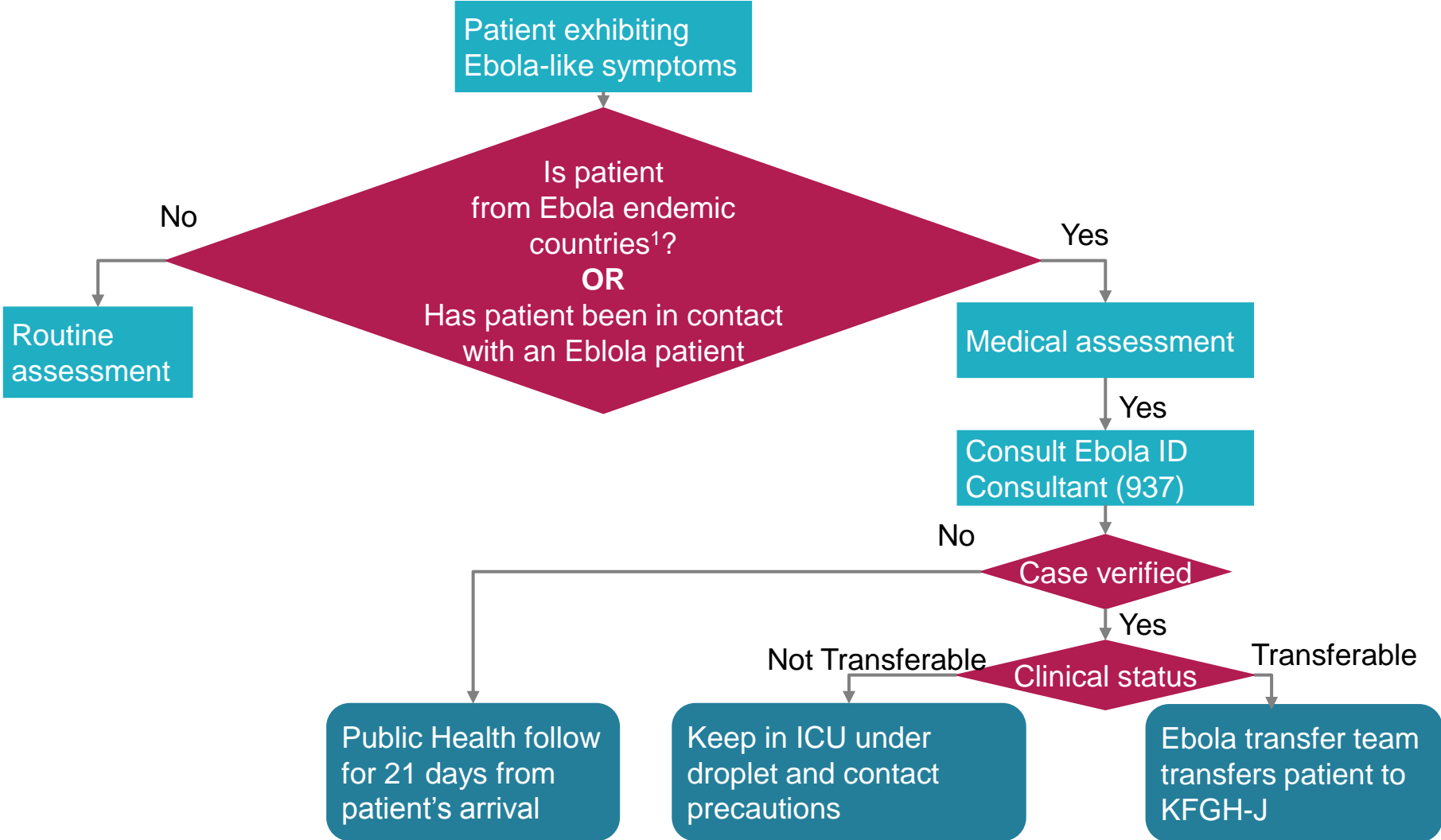


Ports of Entry: Key activities underlying process to follow to identify an EVD case at entry gates upon arrival

- 1 Handout screening card to all passengers arriving from outside the Kingdom at the entry gates (including Saudi nationals)
 - Collect cards and ensure they are filled in correctly
- 2 If passenger has visited endemic countries and / or was in contact with any person infected with EVD disease but is **not** displaying symptoms, collect contact information (use *Contact Information Form for Persons Exposed to Ebola Infection*)
 - Send all forms to Regional Public Health Department; they will follow up on case for 21¹ days (following the MoH *Ebola Prevention Guidelines for Medical Facilities*)
 - In case of movement of the passenger the Departments of the Public Health of the Regions have to coordinate
- 3 If passenger has visited endemic countries and / or was in contact with any person infected with EVD disease and **is** displaying EVD symptoms, quarantine patient immediately (follow MoH *Prevention Guidelines for Medical Facilities*)
 - Notify Department of Public Health in the Region and transfer patient to any specialized hospital in the region with quarantine rooms
 - Coordinate with officials at department and airport authorities to identify contacts that were in physical contact with confirmed Ebola patient on the same flight (use *Contact Information Form for Persons Exposed to Ebola Infection*)
 - Send all forms to the Department of Public Health in the Region
- 4 If passenger is from Congo / Kenya / Nigeria and displays symptoms, quarantine case immediately
 - Let passenger pass in case he does not display symptoms

1 From expected exposure day

Diversion plan for a suspect (Person Under Investigation) Ebola patient at a Hospital or PHC clinic in Makkah, Madinah, Holy Sites, or Jeddah

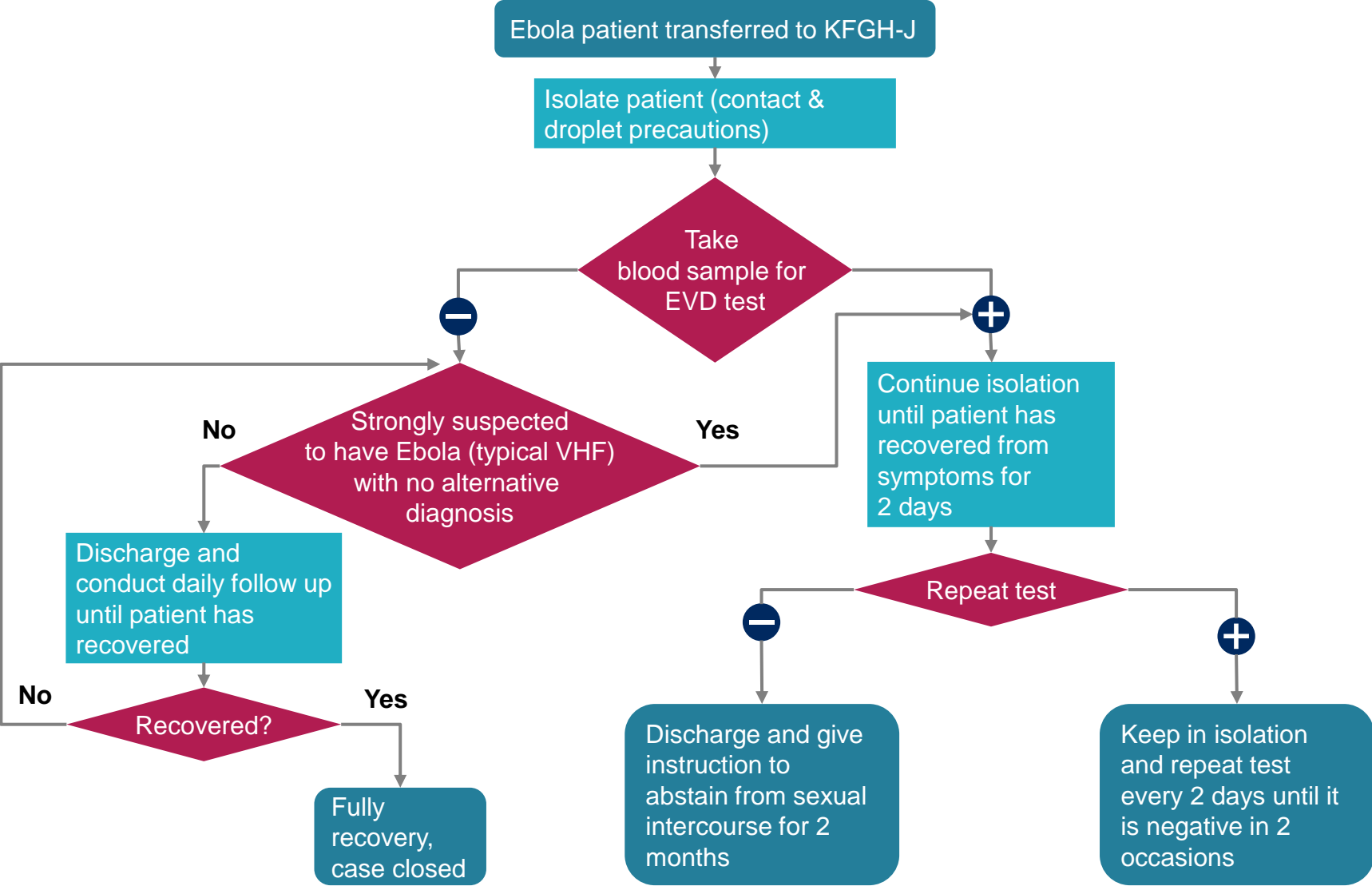


1 Refer to Ebola case definition as per MoH's Ebola online guideline http://www.moh.gov.sa/_layouts/FinalEVDIPCGuidelines08.08.2014.pdf

2 Liberia, Sierra Leone, Guinea (please refer to latest list as per WHO or MoH)



Protocol for managing a suspect (Person Under Investigation) Ebola patient within the Designated Ebola Hospital (KFGH-Jeddah)

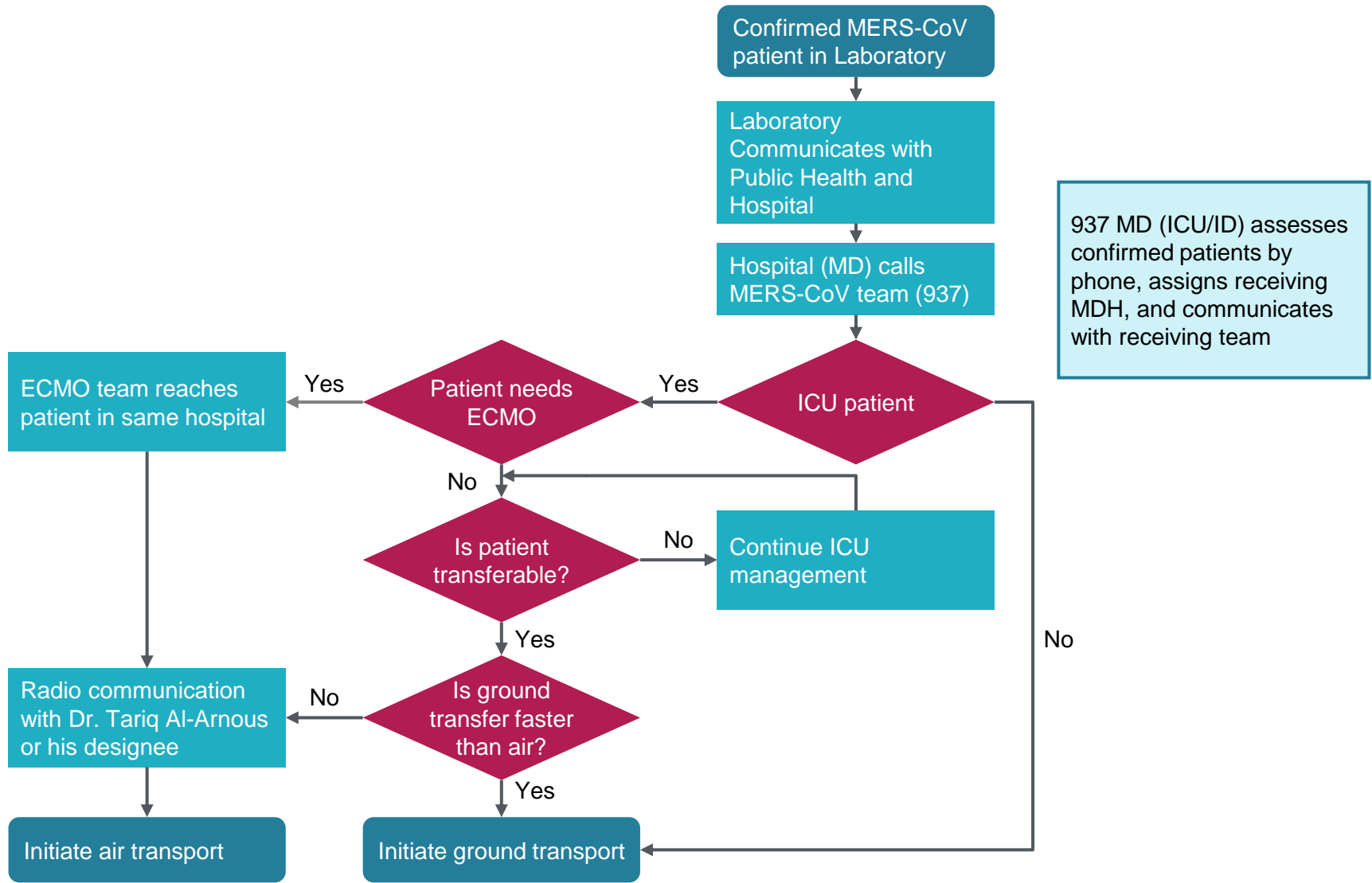


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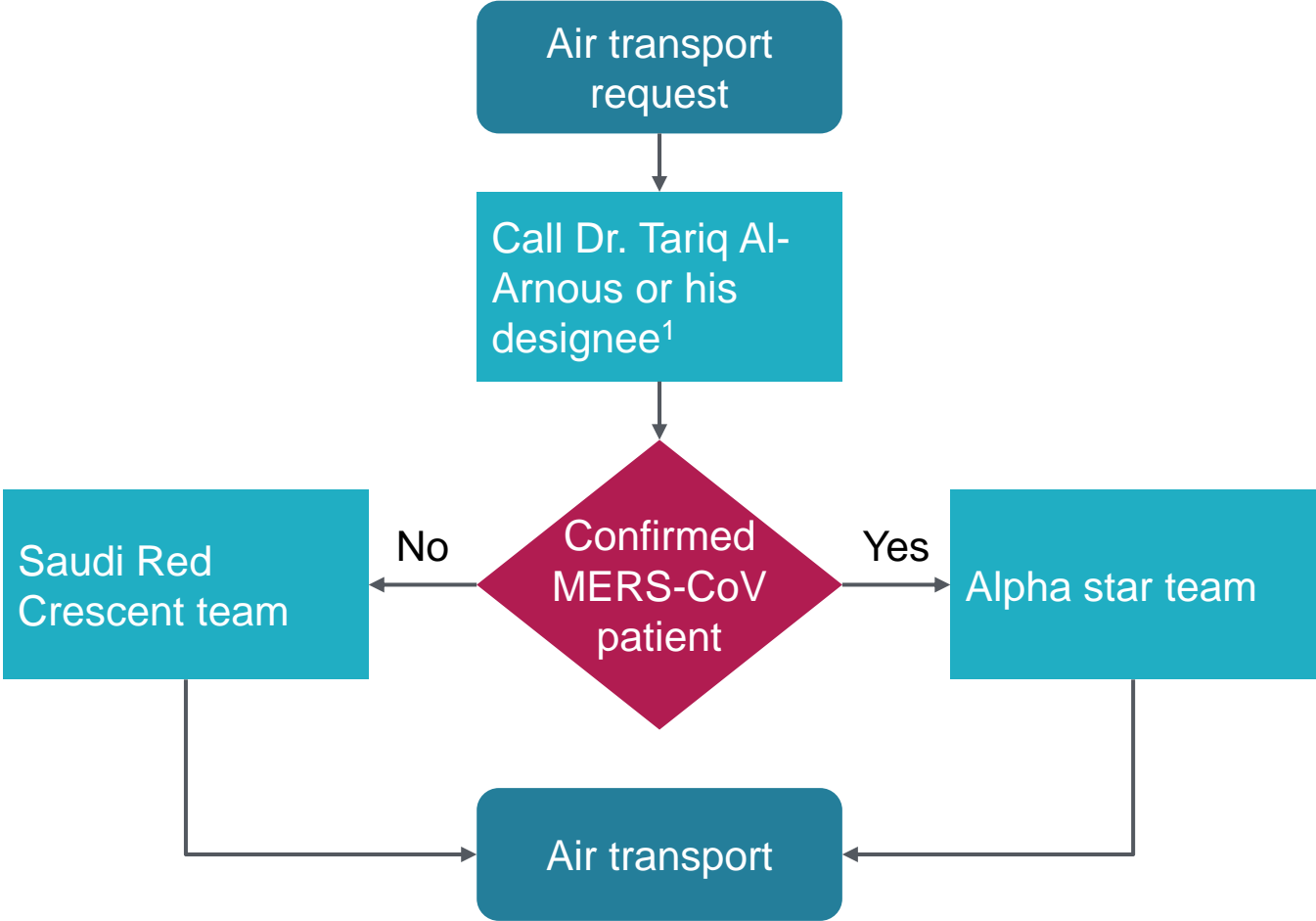
Transfer protocol of a MERS-CoV case from a Hospital to an MDH



937 MD (ICU/ID) assesses confirmed patients by phone, assigns receiving MDH, and communicates with receiving team

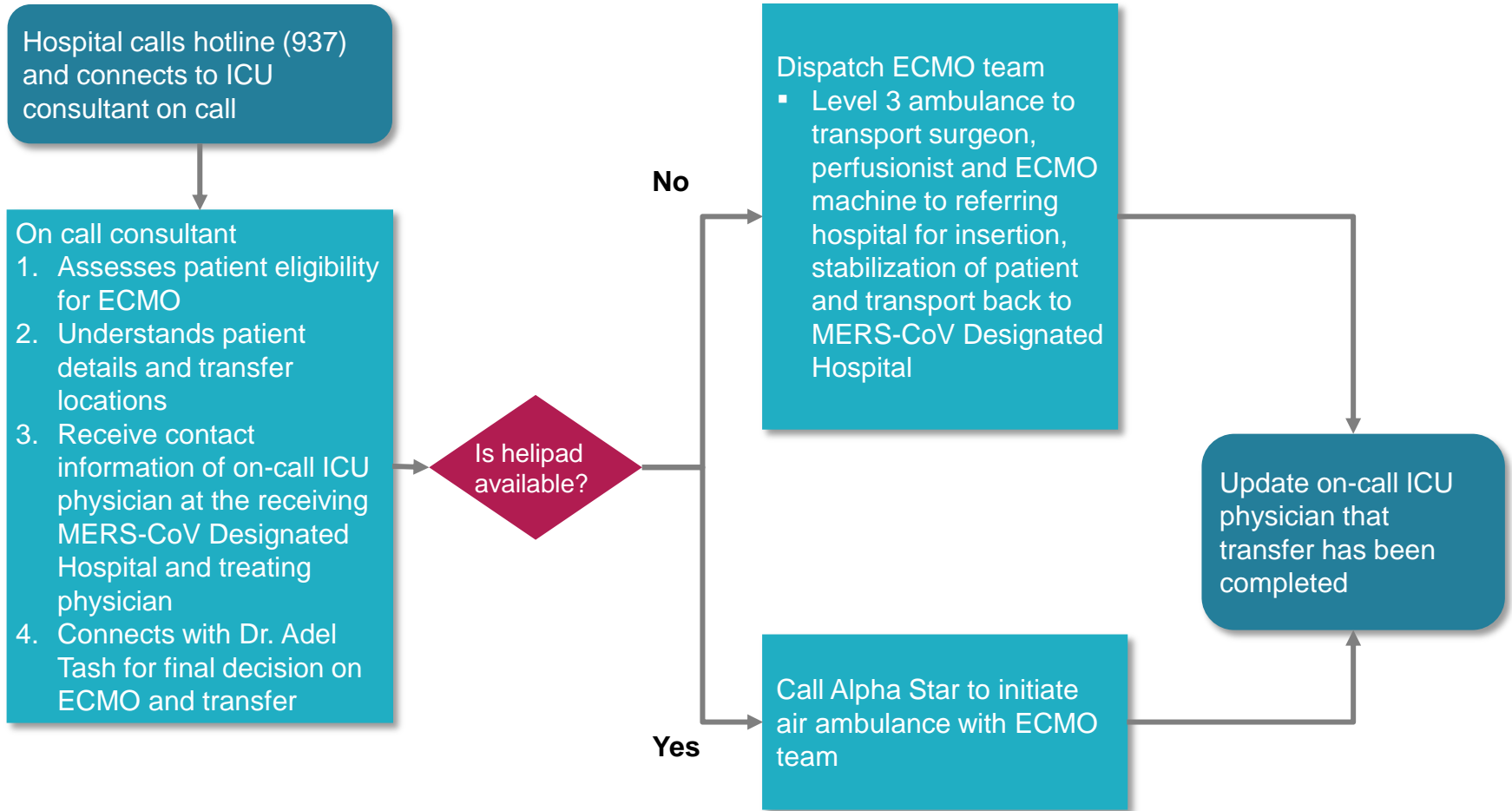


Air transport execution protocol for MERS-CoV cases



¹ Through the radio network

Transfer protocol for ECMO

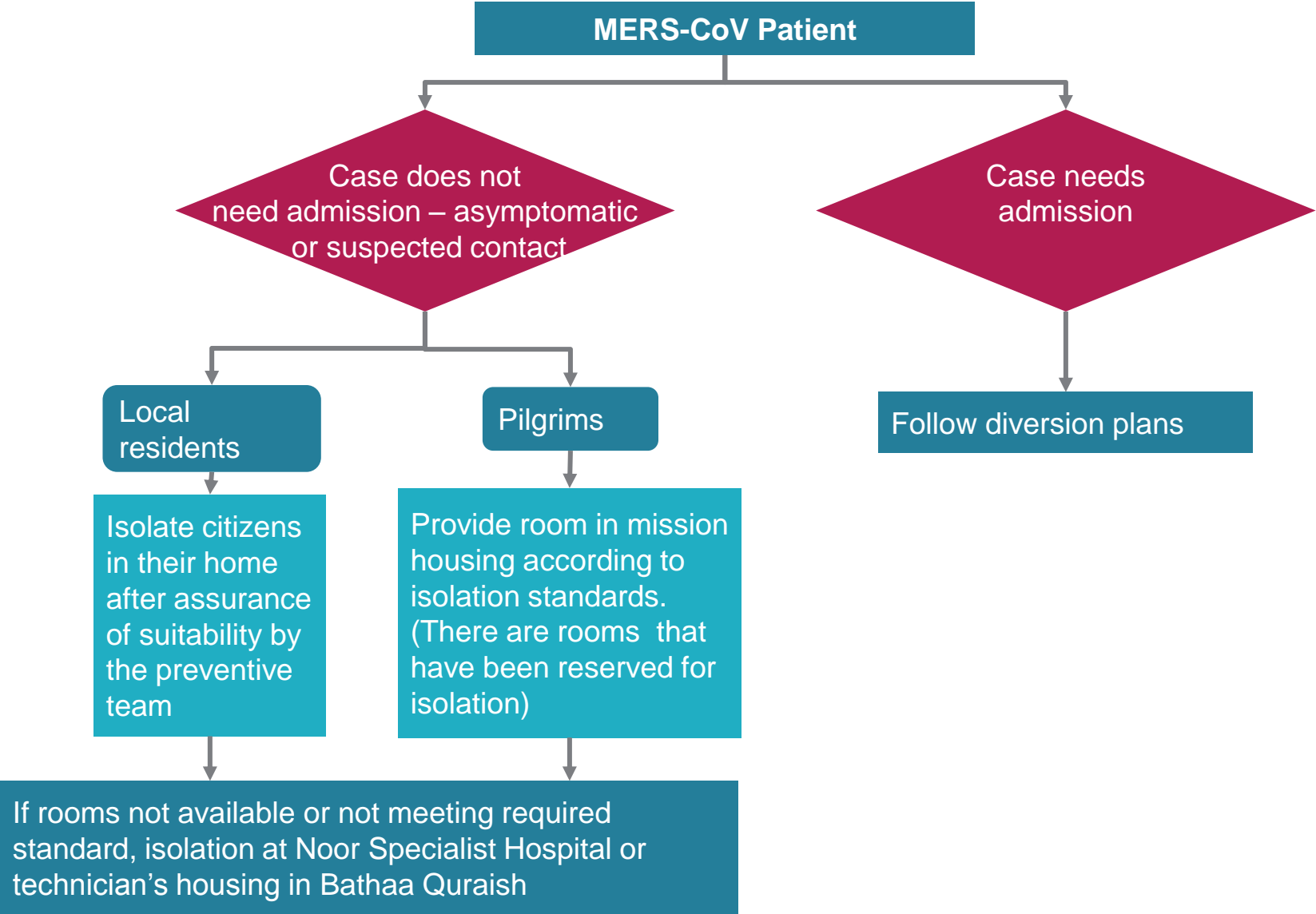


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Home isolation in Makkah protocol



Home isolation in Madinah

