

Challenges of Implementing a Haemodialysis specific Hand Hygiene Program across Multiple Countries

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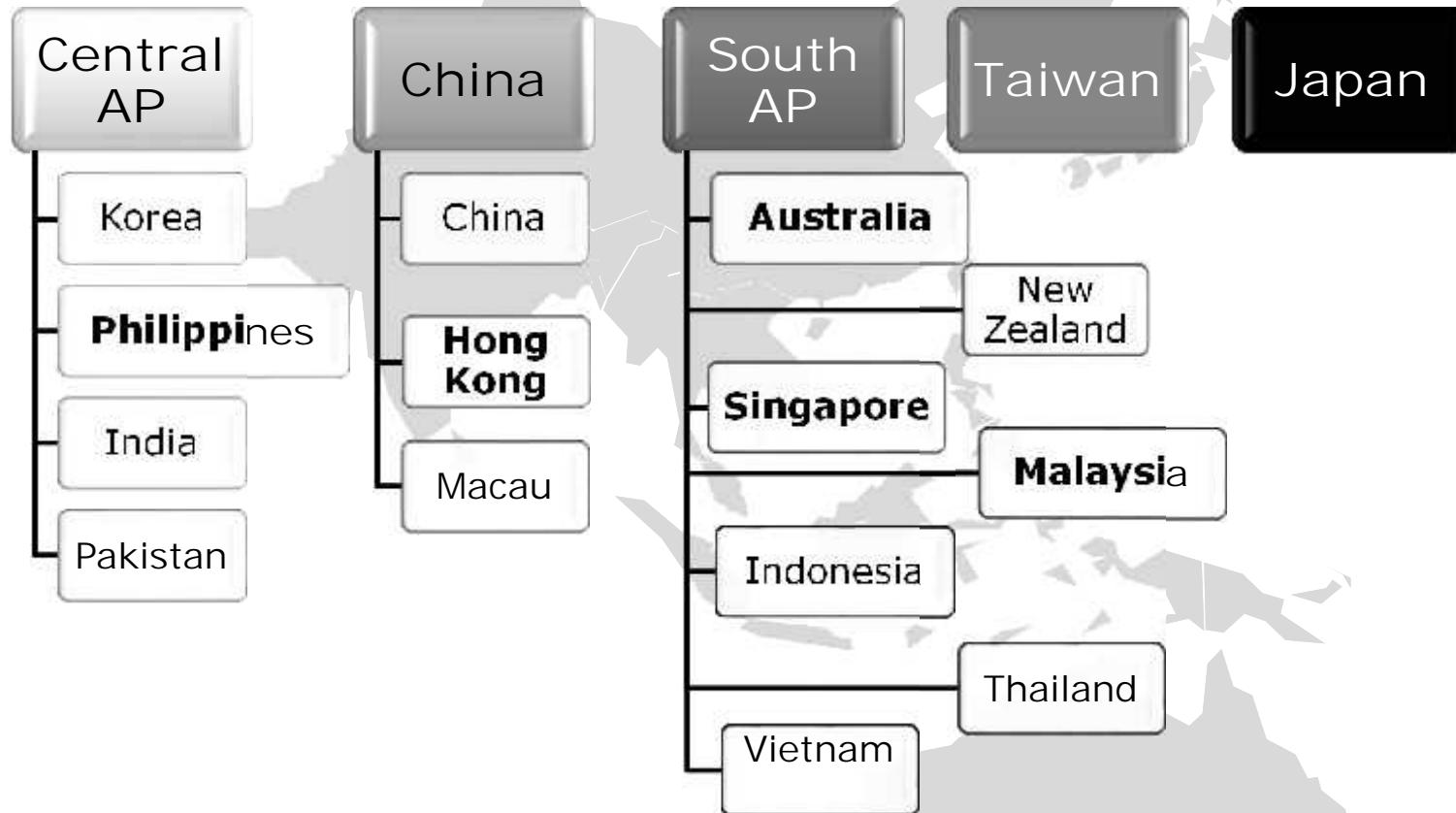
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Fresenius Medical Care Asia Pacific Countries

Clinical
Quality



How it all began Malaysia 2013

Invitation to assist – External Accreditation Preparation

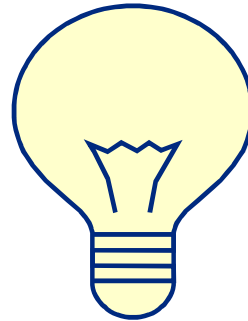
- ✦ Conducted modified 1 day Hand Hygiene workshop
- ✦ Identified issues
 - ❖ Staff had no previous hand hygiene moments education
 - ❖ An assumed knowledge of IPC principles
 - ❖ No assistant / support
 - ❖ Presented course in English only
 - ❖ HHA resources - hospital based not dialysis focussed
 - ❖ Workshop assessment results below auditor requirements





Since 2013 General Dialysis Clinic audits identified infection prevention and control as a major issue across all clinics and countries.

*Light bulb
moment*



2015 July Asia Pacific IPC Link Nurse Program was created

- ❖ Designed Program
- ❖ Program funding approved
- ❖ Negotiated to have program implemented across Asia Pacific countries

IPC Link Nurse Program Country Commitment



Country Commitment



- Commit to** a country wide IPC Program
- Appoint a Country Quality & IPC Manager**
- Each clinic have a designated RN for IPC Link Nurse
- IPC Link Nurse 1 x non-clinical day monthly
- Quarterly teleconference meetings with all IPC Link Nurse

IPC Link Nurse Program Workshop locations



2015
Malaysia
Singapore

2016
Hong Kong
Taiwan
Malaysia
Philippines

Education Challenges

- ❖ Language
- ❖ RN's prior knowledge and experience
- ❖ Understanding of 5 Moments of Hand Hygiene (Moment 2)

❖ Implementation Challenges

- ❖ Cost
- ❖ Healthcare Hierarchical structure
- ❖ Self sustaining program

❖ Measuring Outcomes Challenges

- ❖ Measuring patient outcomes
- ❖ Measuring program outcomes – audit collation

Language

- ❖ Countries with English as a second language
- ❖ Malaysia (Malay)
- ❖ Hong Kong (Cantonese)
- ❖ Taiwan (Mandarin)

Solution

- ❖ Support team to interpret when needed
- ❖ Presentations and forms interpreted into Mandarin and Malay
- ❖ Presentations pictorial when possible
- ❖ Practical demonstrations

情境3-答案

Scenario 3 Answers

- 護士，接觸病人後，酒精性乾洗手=時機4
- Nurse, Hand rub after touching the patient = Moment 4
- 護士，執行穿刺/侵入性程序前，酒精性乾洗手=時機2，戴手套
- Nurse, Hand rub before cannulation / invasive procedure = Moment 2, Gloves on

二個時機但只有一次手部衛生動作

Two moments for one hand hygiene action

N	<input type="radio"/> 1	<input checked="" type="checkbox"/> 1. Rub	<input type="radio"/> 1. On	N	<input type="radio"/> 1	<input checked="" type="checkbox"/> 1. Rub	<input checked="" type="radio"/> 1. On
	<input type="radio"/> 2				<input checked="" type="radio"/> 2		
	<input type="checkbox"/> 3	<input type="checkbox"/> 2. Wash	<input type="checkbox"/> 2. Off		<input type="checkbox"/> 3	<input type="checkbox"/> 2. Wash	<input type="checkbox"/> 2. Off
	<input checked="" type="checkbox"/> 4				<input type="checkbox"/> 4		
	<input type="checkbox"/> 5	<input type="checkbox"/> 3. Missed	<input type="checkbox"/> 3. Cont.		<input type="checkbox"/> 5	<input type="checkbox"/> 3. Missed	<input type="checkbox"/> 3. Cont.

Education challenges

RN's prior knowledge and experience



Registered Nurse prior knowledge and experience

Some countries RN limited or no hospital nursing experience and minimal understanding of IPC principles

Solution

Additional education on general Infection Prevention and Control principles

Throughout workshop continually referred to IPC principles behind audits

Education challenges

Understanding 5 moments of hand hygiene



Limited or no knowledge of 5 Moments of hand hygiene

- ❖ No prior education of 5 moments of HH
- ❖ Applying 5 Moments of HH to haemodialysis practices
- ❖ Misunderstanding of Moment 2 'Before a Procedure'

Solution

- ❖ All clinic staff complete HHA OLP annually
- ❖ All clinics display hand hygiene posters
- ❖ Presentations showing pictorial 5 moments of HH in haemodialysis
- ❖ Clarify Moment 2 as before invasive procedures and when they occur in haemodialysis
- ❖ Haemodialysis workflow indicating hand hygiene moments

Moment 2

– Before an invasive procedure



Implementation Challenges

- Cost



Cost barrier to change

Clinics operating on low budgets

Solution

Adapt for each country

- ❖ Review current country processes
- ❖ Make effective changes at no cost e.g. moving ABHR to where procedures were being performed
- ❖ Cost savings e.g. reduce excessive glove use, money saved could be spent elsewhere e.g. disposable aprons changed between patients

Implementation Challenges - Hierarchical system

Challenges / Solutions

Challenges

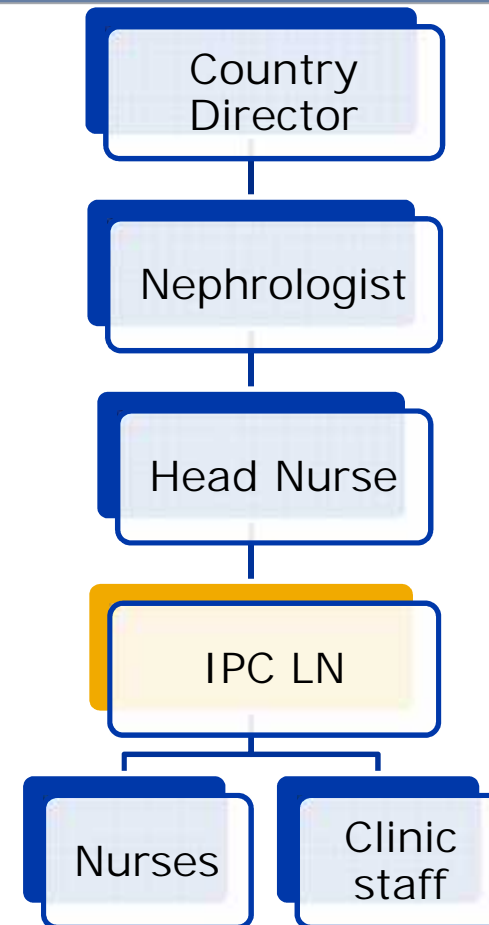
IPC LN educated about new processes.
Blocked by Head nurse and
Nephrologist who didn't understand the
reasons for the changes

Solutions

Include head nurses in training
program

Discuss IPC LN program with
Nephrologists at Medical Advisory
Board Meetings

Hierarchical System





Day 1 Hand Hygiene

- Principles
- Moments in Haemodialysis
- Auditing theory
- Auditing practical
 - Hand Hygiene

Day 2 IPC & Aseptic Technique

- IPC auditing
- AT Principles
- AT Process Mapping
- AT Competency
- Auditing practical
 - Hand Hygiene
 - IPC
 - Aseptic Technique

Implementation Challenges

Self sustaining program

Workshop Day 3 Co-ordinating a Program - Clinic Level - Country Level

Morning – all students

- ❖ Co-ordinate & Implement an IPC Link Nurse Program at Clinic Level

Afternoon – Country IPC Manager

- ❖ Co-ordinate & Implement an IPC Program at Country Level

- ❖ Country IPC managers attend the IPC LN Workshop
- ❖ KPI's developed for country trainers and auditors
 - ❖ 3 x audit periods aligned with HHA.
 - ❖ Clinics achieve 100 audit moments per audit period
- ❖ Asia Pacific IPC Committee created to support the country IPC Manager and monitor progress of IPC LN program

Measuring Outcomes Challenges

Challenges

Difficult to measure patient outcomes

- ❖ No surveillance of MRO's
- ❖ BSI data not collected
- ❖ Data collected on patients BBV not available outside of clinic

Difficult collecting hand hygiene audit data

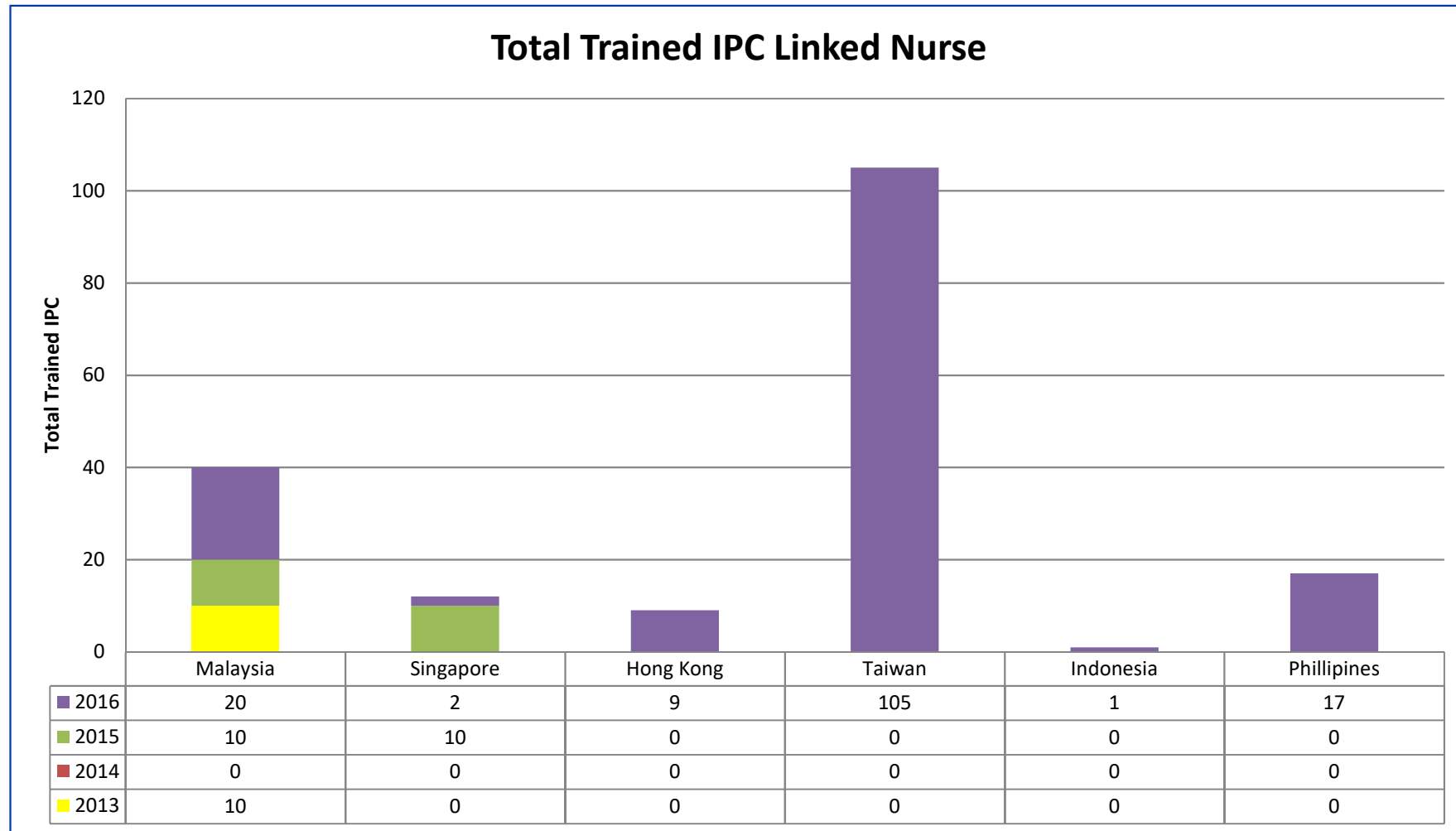
- ❖ Data entry and collation was paper based, time consuming

Solution

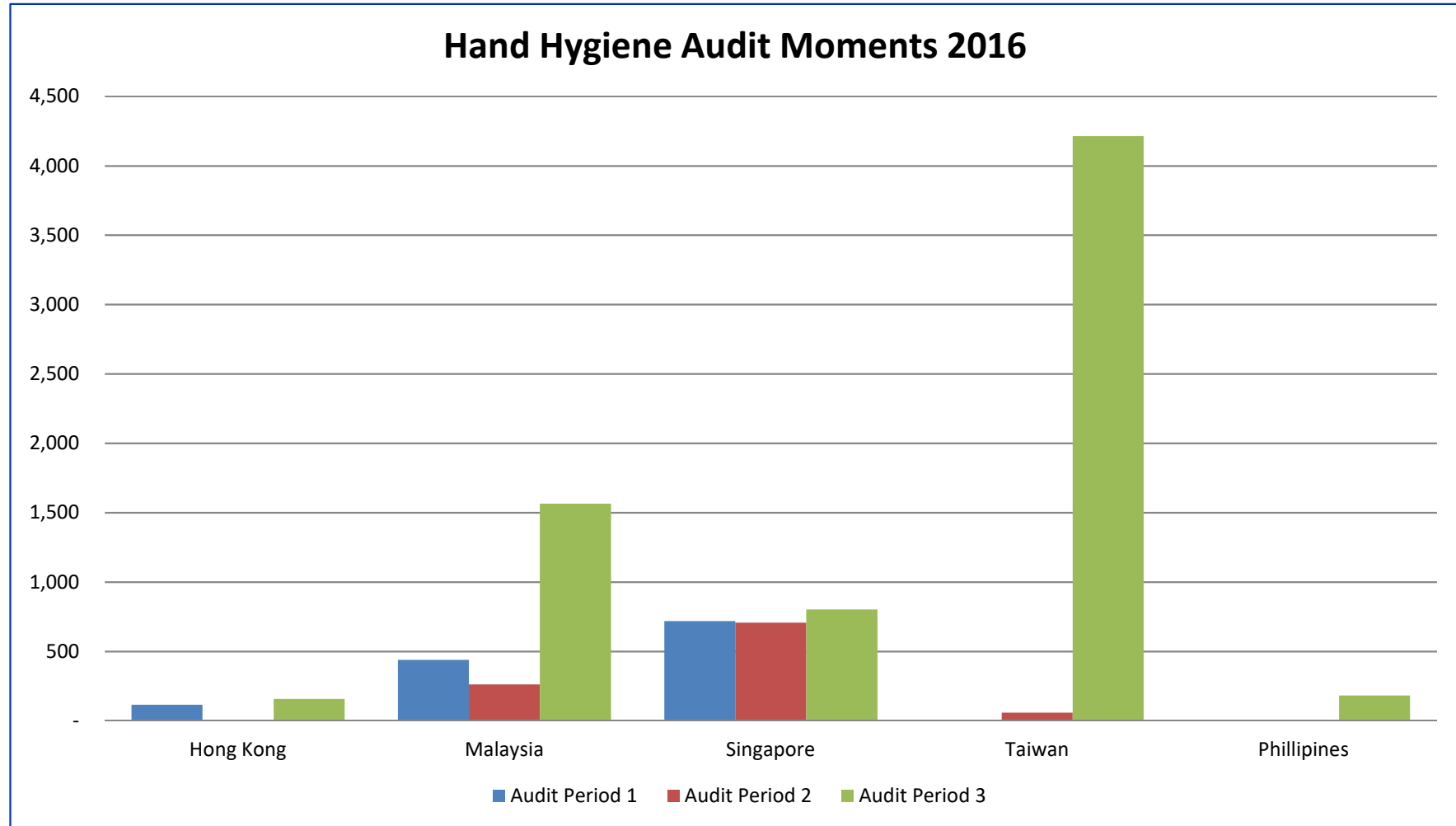
Measure workshop outcomes

- ❖ Number of trained IPC Link Nurses
- ❖ IPC Audits completed and compliance
- ❖ Access to HHA data base to collate hand hygiene audits and compliance

IPC Trained Linked Nurse



Hand Hygiene Audit moments

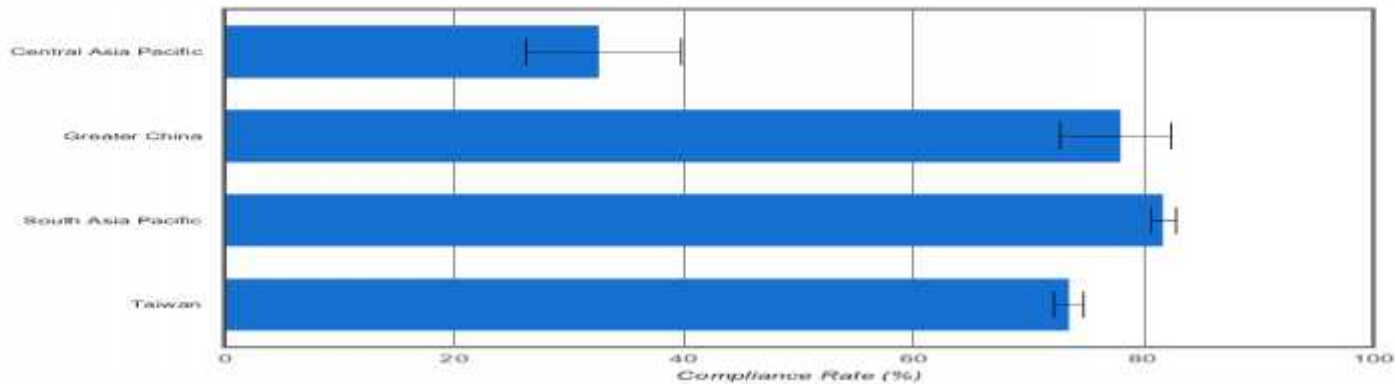


Hand Hygiene audit collation

State Compliance Report - AP Fresenius Medical Care

Name	Correct Moments	Total Moments	Compliance Rate	Lower Confidence Interval	Upper Confidence Interval
AP Fresenius Medical Care	7,103	9,243	76.8%	76%	77.7%

Name	Correct Moments	Total Moments	Compliance Rate	Lower Confidence Interval	Upper Confidence Interval
1 Central Asia Pacific	59	181	32.6%	26.2%	39.7%
2 Greater China	213	273	78.0%	72.7%	82.5%
3 South Asia Pacific	3,671	4,491	81.7%	80.6%	82.8%
4 Taiwan	3,160	4,298	73.5%	72.2%	74.8%



When healthcare workers correctly performed hand hygiene, the proportion of moments where soap and water was used was 38.3%

When healthcare workers correctly performed hand hygiene, the proportion of moments where alcohol based hand rub was used was 71.3%

Of all moments where glove use is recorded, healthcare workers FAILED to perform hand hygiene 18% of the time

When gloves are put ON, the proportion of moments that were MISSED is: 13.3%

When gloves are taken OFF, the proportion of moments that were MISSED is: 11.2%

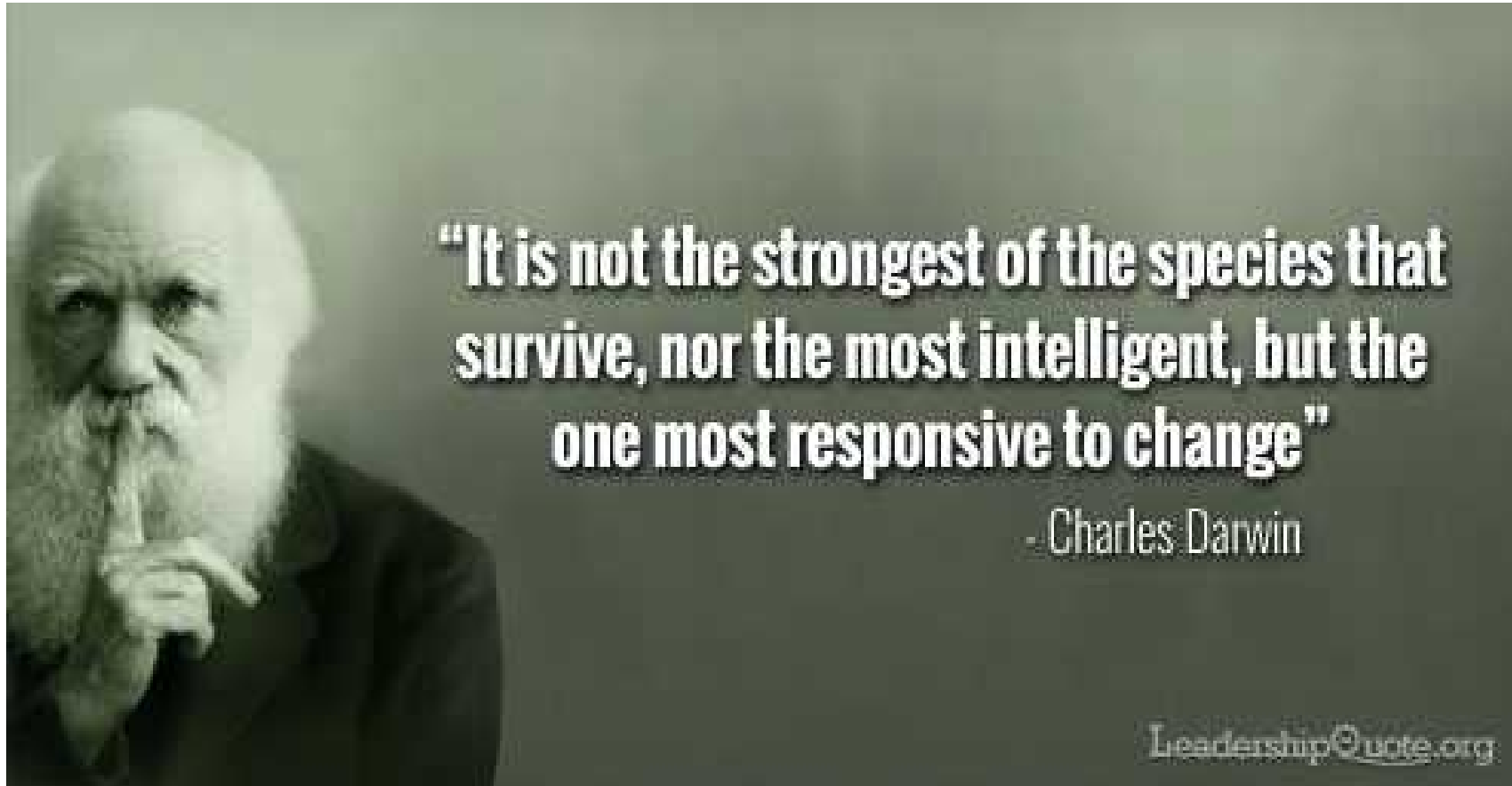
Future Goals

- ❖ Aim minimum 1 trained IPC Link Nurse in every clinic
- ❖ Monitor & report IPC Link Nurse HH auditing activity
- ❖ Countries prepare annual IPC report including IPC Link Nurse workshop outcomes
- ❖ Improve training resources with Haemodialysis HH video

Lessons Learnt

- ❖ Be adaptable
- ❖ Work with the countries
- ❖ Support the countries in running their own programs

“Adapt & Adopt”



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