

# Development of **Key Risk Indicators (KRIs)** for Effective Monitoring of Incident Trends and Risks Performance

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# Incidents

**Advance Incident Reporting System 3.0**



 Hospital Authority

**For NTWC staff only**

Corp ID:

Password:

Please login with the web mail login name and password (i.e. the Corp id and password)

Sample Corp ID: "abc123".  
Need not to add "CORP".

**For enquiry, please kindly contact [HA IT Call centre](#)**

**To follow-up / update [AIRS-2](#) reported cases, please login [AIRS 2.0](#)**

Please use Internet Explorer 8 with resolution 1024 x 768 to optimizing the page view in AIRS-3.

How to make use of  
AIRS data for effective  
risks monitoring?





Graphical  
incident trends

Rate-based  
figures

**Key Risk Indicators  
(KRI)**

Accurate  
database

Can monitor  
specific risks

# 19 Key Risk Indicators

## Data a/v in AIRS

1. All incidents, SEs, SUEs
2. Falls
3. Patient Misidentification
4. Medication
5. Missing & Walk Away
6. Blood Transfusion
7. Awareness of Investigation Results & Specimen Handling
8. Suicide
9. Facility Failure & Environment
10. Security & Fire-related
11. IT & Privacy
12. Medical Device & Equipment

## From AIRS & Clinical Departments

13. Unanticipated Clinical Deterioration
14. Unanticipated Surgical Outcomes
15. Nosocomial infection

## From AIRS, Admin & HR

16. Staff Injury & Incidents
17. Staffing & Turnover
18. Bed Occupancy

## 19. Risk Watch List

- Incidents not included in regular KRIs but **required special attention**, e.g.
  - Tourniquet retention
  - Foreign bodies found in patient diet



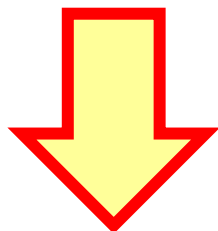
Categorise according to  
**NTWC Risk Taxonomy**  
(adopted from EQuIP)



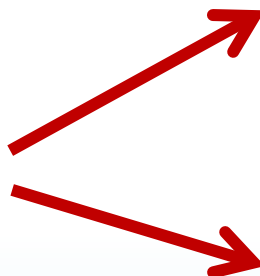
Add **non-AIRS risk data**  
(E.g. staffing, sick-leave days,  
bed occupancy)



Import **denominators**  
(E.g. BDO, FTE,  
blood unit transfused)



**KRI reports**

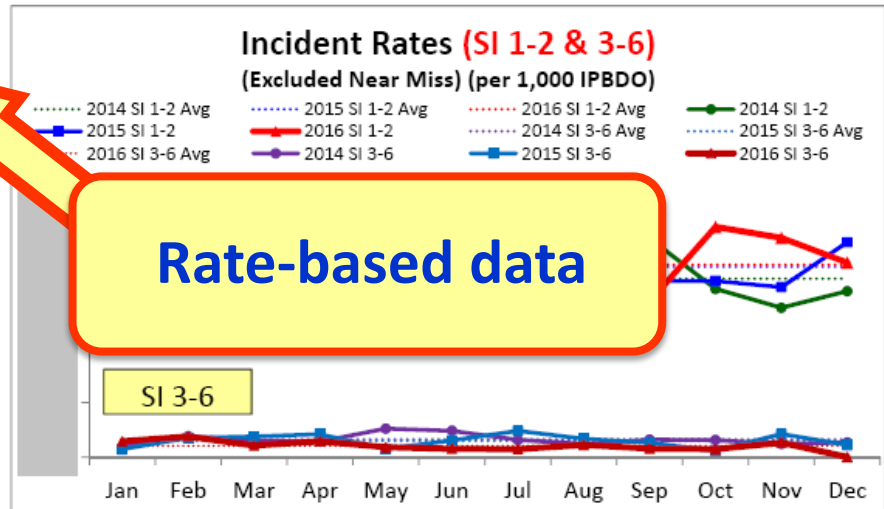
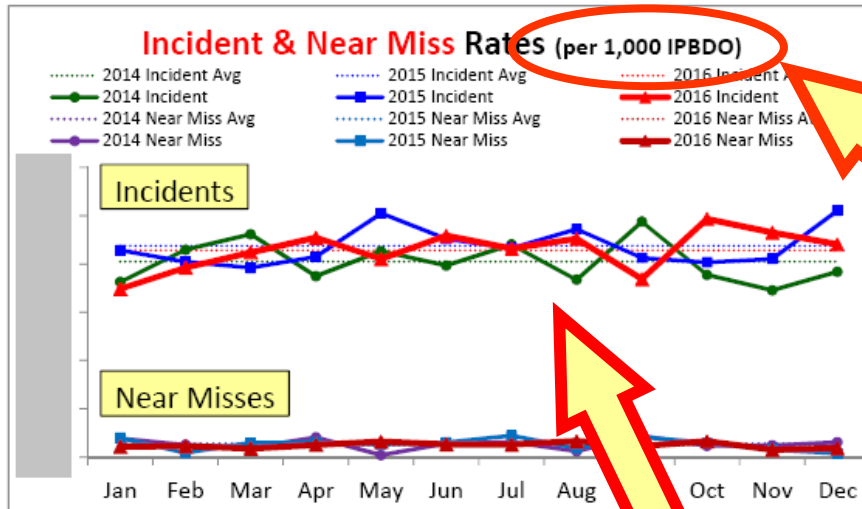


**Report** to  
Cluster/Hospital Management

**Follow up** by  
Risk-related Committees  
for unfavourable trends

## Performance of Risk Indicators

### Incidents & Near Misses



**Rate-based data**

**Continuous trends  
comparing past 2 years' data**

Trend of SE (last 8 quarters)	
Wrong patient/part	
Retained instrument	
ABO incompatibility	
Medication error	
Intravascular embol	
In-patient suicide	
Maternal death	
Infant abduction/wrong d/c	
Other adverse events	
<b>TMH Total</b>	
<b>HA Total</b>	

Trend of SUE (last 8 quarters)	1Q 2015	2Q 2015	3Q 2015	4Q 2015	1Q 2016	2Q 2016	3Q 2016	4Q 2016	Total
Medication error									
Patient misidentification									
<b>TMH Total</b>									
<b>HA Total</b>									

**Observations:**

**Latest observations**

HA Total (7

HA Total (7  
quarters) /  
7 Clusters

## Performance of Risk Indicators

### Falls

#### Fall Incident Rates (per 1,000 IPBDO)

2014 SI 1-2 Avg 2015 SI 1-2 Avg 2016 SI 1-2 Avg 2014 SI 1-2 2015 SI 1-2 2016 SI 1-2  
2014 SI 3-6 Avg 2015 SI 3-6 Avg 2016 SI 3-6 Avg 2014 SI 3-6 2015 SI 3-6 2016 SI 3-6

SI 1-2

SI 3-6

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

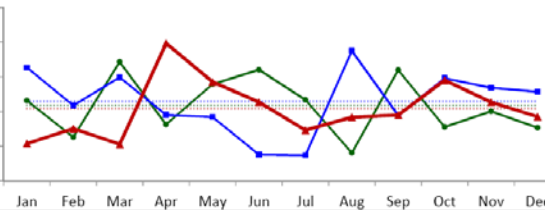
Observations:

## Performance of Risk Indicators

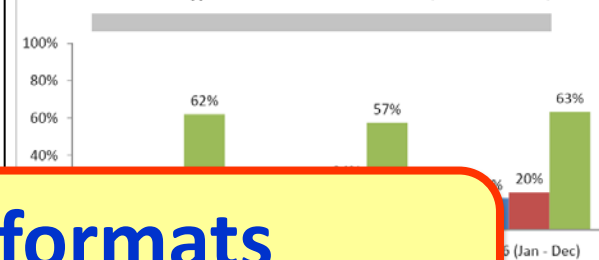
### Medication

#### Incident Rates (Excluded Near Miss) (per 1,000 IPBDO)

2014 Avg 2015 Avg 2016 Avg 2014 2015 2016



#### % of Errors Types in Medication Incidents (Excluded Near Miss)



#### Trend of SUE (MI) (last 8 quarters)

	TMH	HA
1Q 2015		
2Q 2015		
3Q 2015		
4Q 2015		
1Q 2016		
2Q 2016		
3Q 2016		
4Q 2016		
Total		

Observations:

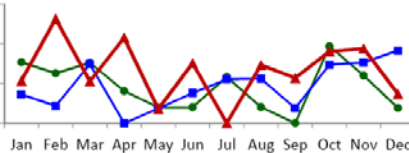
Different formats  
for individual KRI report

## Per

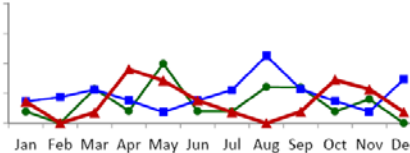
### M

#### Incident Rates (Missing - AT RISK) (per 1,000 IPBDO)

2014 2015 2016

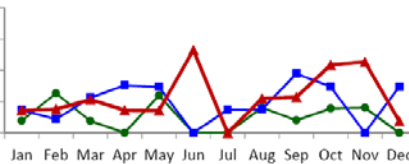


2014 2015 2016



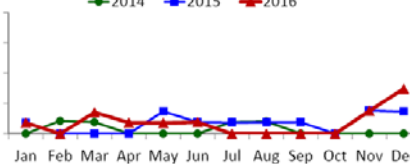
#### Incident Rates (Walk Away) (per 1,000 IPBDO)

2014 2015 2016



#### Incident Rates (Not Returned from Authorized Leave) (per 1,000 IPBDO)

2014 2015 2016



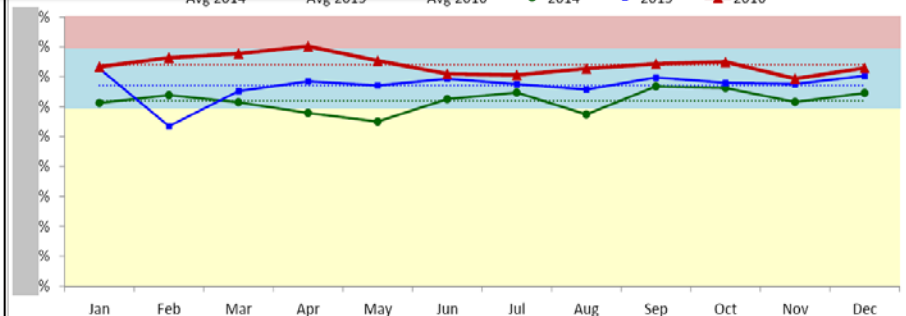
Observations:

## Risk Indicators

### ancy

#### ay Occupancy (%)

Avg 2014 Avg 2015 Avg 2016 2014 2015 2016



Observations:

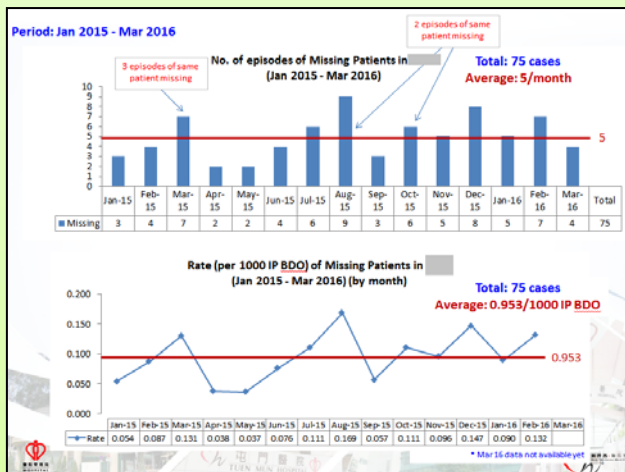


# In-depth analysis for specific risks if required

## Patient Missing

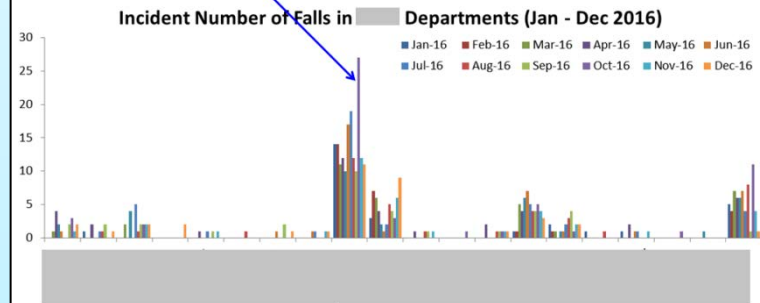
### Follow-up on Incidents of Missing Patients in [REDACTED]

NSD / Q&S / Admin  
8 Apr 2016

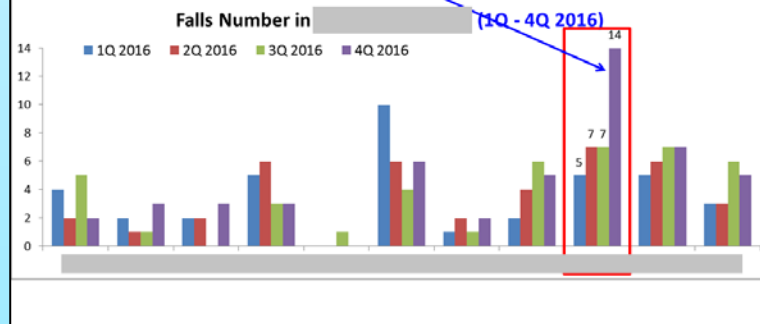


## Patient Falls

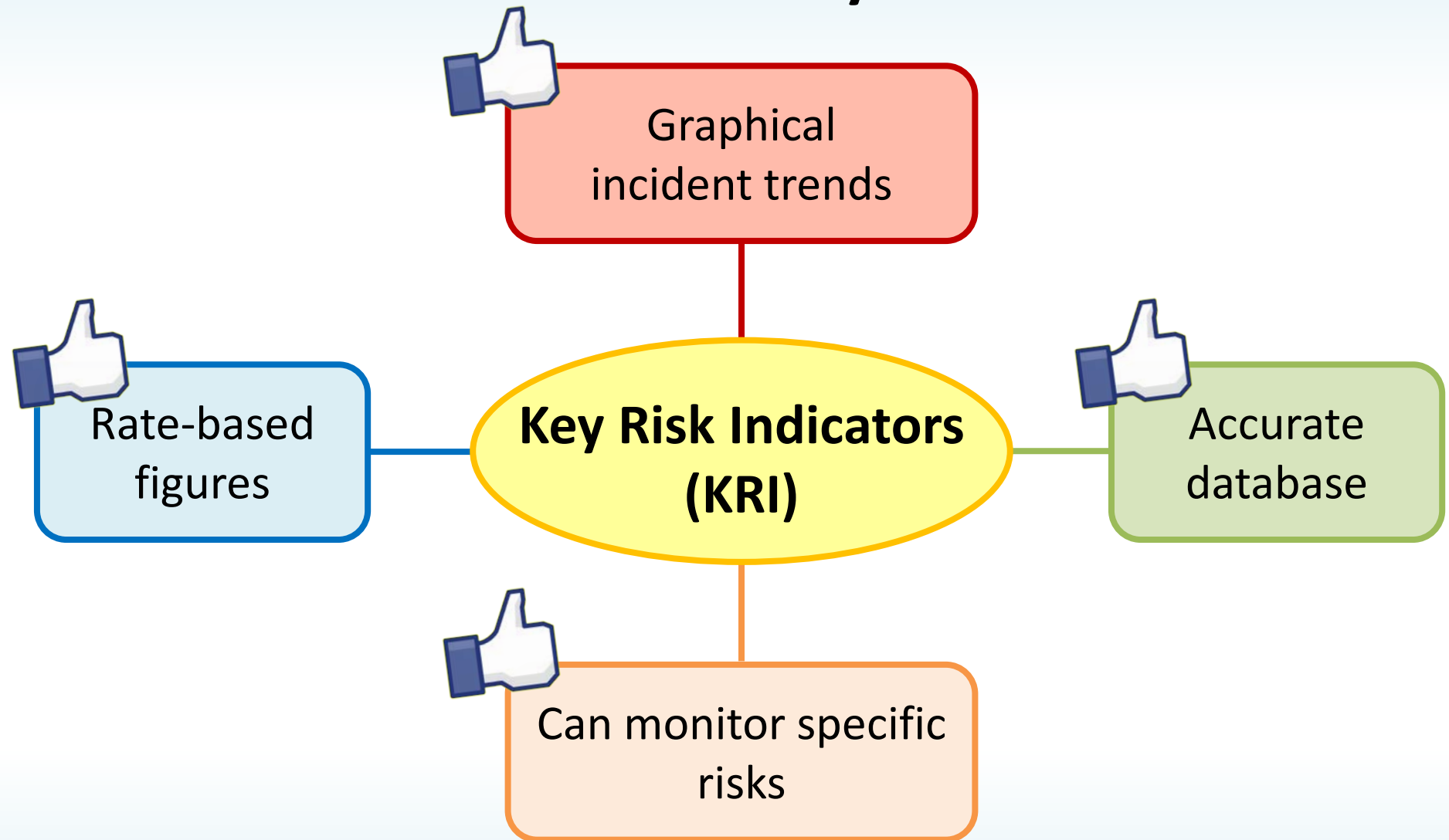
### Analysis 1: - High incident number in [REDACTED] in Oct 2016



### Analysis 3: In 4Q 2016, there were 14 fall cases in Ward [REDACTED], which was doubled than 2 & 3Q 2016



# Summary



# Thank You!