Policy and Practice: A Partnership for Better Outcomes

"Accreditation and Patient Safety Right From the Beginning!"

Making use of Data – what to measure and why?

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Thoughts for the Day

- We don't know, what we don't know
- We can't act on what we don't know
- We won't know until we measure
- We won't measure until we report
- Hence, we just don't know

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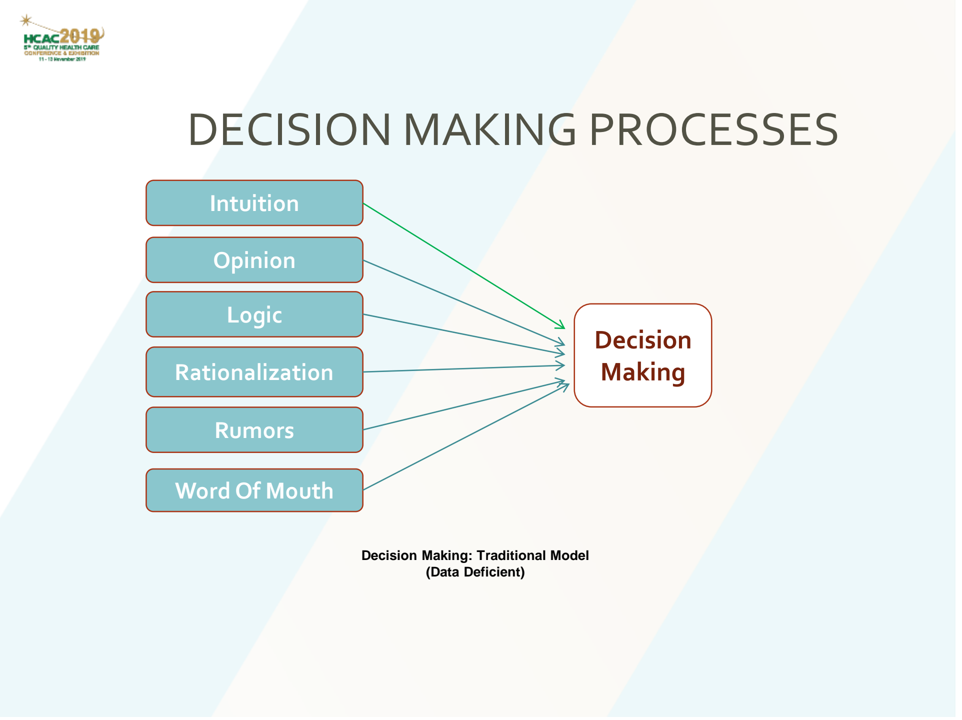

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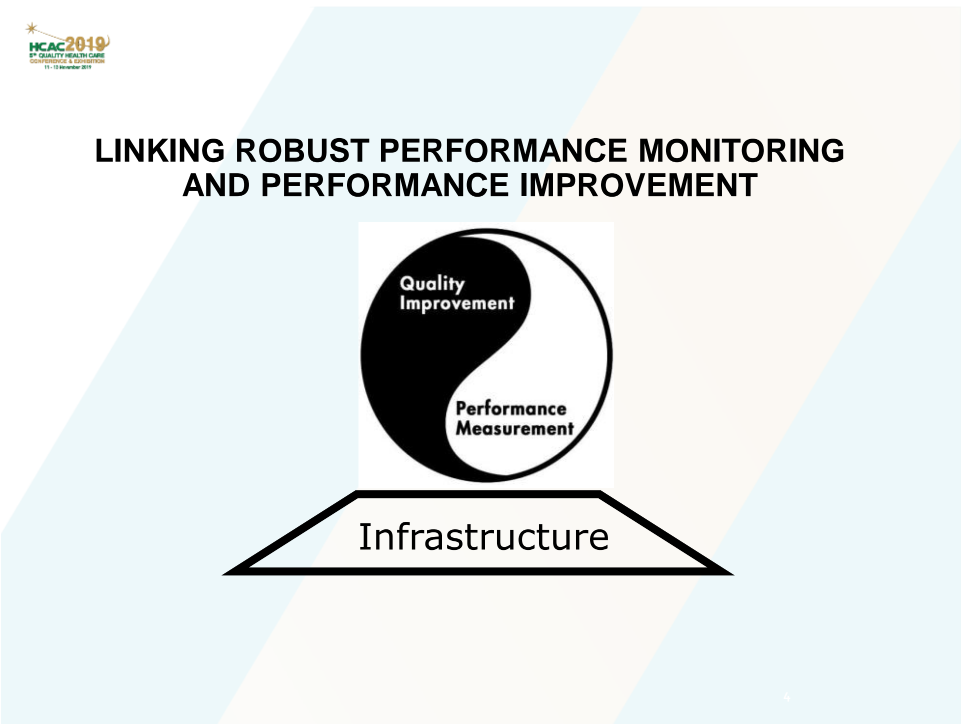

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What Is Data Analytics?

- Data analytics is the science of analyzing raw data in order to make conclusions about that information.
- Data analytics techniques can **reveal trends and metrics** that would otherwise be lost in the mass of information.
- This information can then be used to optimize processes to increase the overall efficiency of a business or system.

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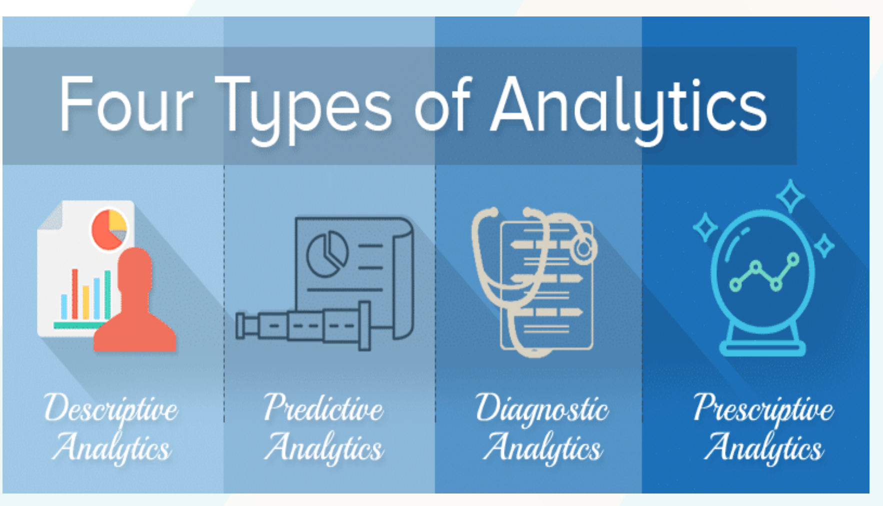

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The process involved in data analysis involves several different steps

1. The first step is to determine the data requirements or how the data is grouped.
2. The second step is the process of collecting it.
3. Once the data is collected, it must be organized so it can be analyzed.
4. The data is then cleaned up before analysis.

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Examples of Data Sources for Patient Safety

- Agency for Healthcare Research and Quality (AHRQ)
- Veterans Affairs National Center for Patient Safety (NCPS)
- CMS Hospital compare (Patient Safety Indicators, HCAHPS)
- Occupational Health Safety Administration (OSHA)
- World Health Organization (WHO)
- Saudi Food and Drug Organization (SFDA)
- Accrediting body sentinel events reports
- Other

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Examples of internal hospital data sources for patient safety

- Safety/security event data
- Survey results
- Medication safety events
- Sentinel event trends
- Complaints & grievances and compliments
- Claims
- Financial losses
- Dashboards/scorecards
- Safety huddles, walk-rounds
- Standard operating procedures
- Patient safety culture surveys
- Patient Feedback

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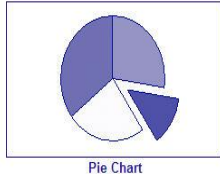
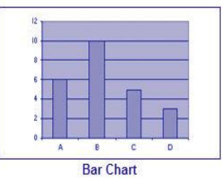
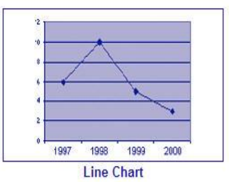
Displaying the Data


Pie Chart


Bar Chart


Line Chart

MoreSteam Note: Pie charts help show the relationship of a part to the whole, bar charts allow the comparison of values within a category (e.g. store sales by Location), and line charts track the progression of a characteristic over time. All these charts are easily created using the graphical tools included in most statistical software packages. The Insert > Chart function in Excel® can be used if the data are already summarized in a table.

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Scorecard example

Goal	Target	Owner	Review Frequency	Aug-16	Sep-16	Oct-16	YTD 2016
Finance							
Patient Information Accuracy Rate	99%	Paul	Monthly	99%	100%	97%	100%
Denials and Write-offs as % of Overall Charges	4%	Sarah	Monthly	5%	4%	3%	5%
Number of Days Charged in A/R	5	Sarah	Monthly	2	6	1	4
People							
Absenteeism Hours	30	Joseph	Monthly	15	20	30	22
Acceptable Overtime Hours	7%	Joseph	Monthly	8%	4%	5%	6%
Staffing: Open Positions	3	Jennifer	Monthly	2	1	1	1
Clinical							
Hospital-Wide 30 Day Readmissions	10.0%	Mark	Monthly	13.0%	11.0%	9.8%	12.2%
Heart Failure Mortality	13.2%	Mark	Monthly	12.7%	11.0%	9.0%	10.7%
Inpatient LOS (Days)	3	Catherine	Monthly	2.7%	2.3%	2.6%	2.5%

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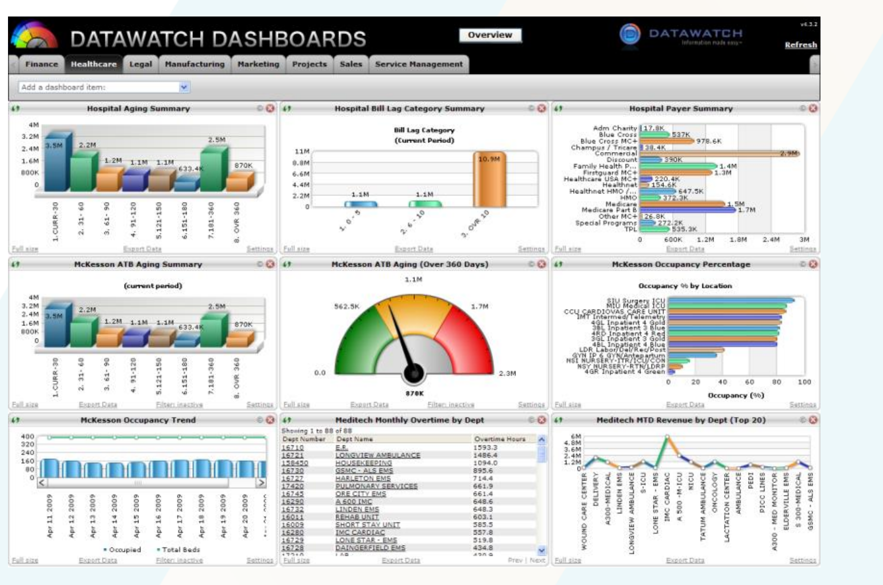
Dashboard example



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Data must be actionable

video

https://www.youtube.com/watch?v=YKb_t_xvSy4

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The HSOPSC Data Entry

1. Teamwork Within Units
2. Supervisor/Manager Expectations & Actions Promoting Patient Safety
3. Organizational Learning – Continuous Improvement
4. Management Support for Patient Safety
5. Feedback & Communication About Error
6. Frequency of Events Reported
7. Overall Perceptions of Patient Safety
8. Communication Openness
9. Teamwork Across Units
10. Staffing
11. Handoffs & Transitions
12. Nonpunitive Response to Error

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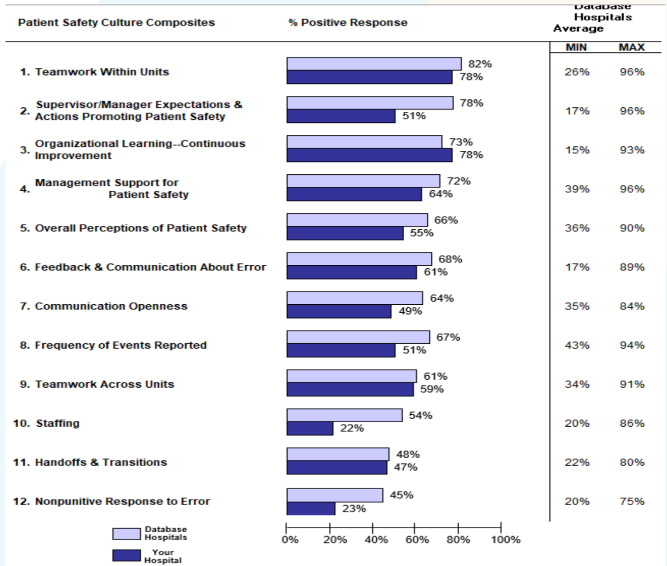
Benchmarking the results

Table 6-3. Composite-Level Comparative Results—2016 Database Hospitals

Patient Safety Culture Composites	Average % Positive	s.d.	Composite % Positive Response Percentiles: Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Teamwork Within Units	82%	5.91%	26%	75%	79%	82%	85%	88%	96%
2. Supervisor/Manager Expectations & Actions Promoting Patient Safety	78%	6.66%	17%	71%	75%	79%	83%	86%	96%
3. Organizational Learning—Continuous Improvement	73%	7.44%	15%	63%	68%	73%	77%	81%	93%
4. Management Support for Patient Safety	72%	9.14%	39%	60%	67%	73%	79%	83%	96%
5. Feedback & Communication About Error	68%	8.05%	17%	58%	63%	68%	74%	78%	89%
6. Frequency of Events Reported	67%	7.37%	43%	57%	61%	67%	71%	76%	94%
7. Overall Perceptions of Patient Safety	66%	8.50%	36%	55%	60%	66%	72%	77%	90%
8. Communication Openness	64%	6.70%	35%	55%	59%	64%	68%	72%	84%
9. Teamwork Across Units	61%	9.32%	34%	50%	56%	61%	67%	73%	91%
10. Staffing	54%	9.34%	20%	42%	48%	53%	60%	66%	86%
11. Handoffs & Transitions	48%	10.37%	22%	35%	41%	46%	54%	62%	80%
12. Nonpunitive Response to Error	45%	8.75%	20%	35%	39%	44%	51%	56%	75%

Benchmarking the results



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National Reporting and Learning System SAWTAK

- Patient safety is a national health concern, affecting patient in all healthcare sectors. Providing safe health care for patients is fundamental, however, the studies have shown that medical error the 3rd leading cause of death in USA (2016 BMJ).
- As a step toward improving patient safety, Saudi Patient Safety Center "SPSC" is planning to implement a **national patient safety and risk management system** across all healthcare facilities within Saudi Arabia and establish national database to identify frequency and causes of adverse events which is the crucial basis for patient safety and healthcare improvement.

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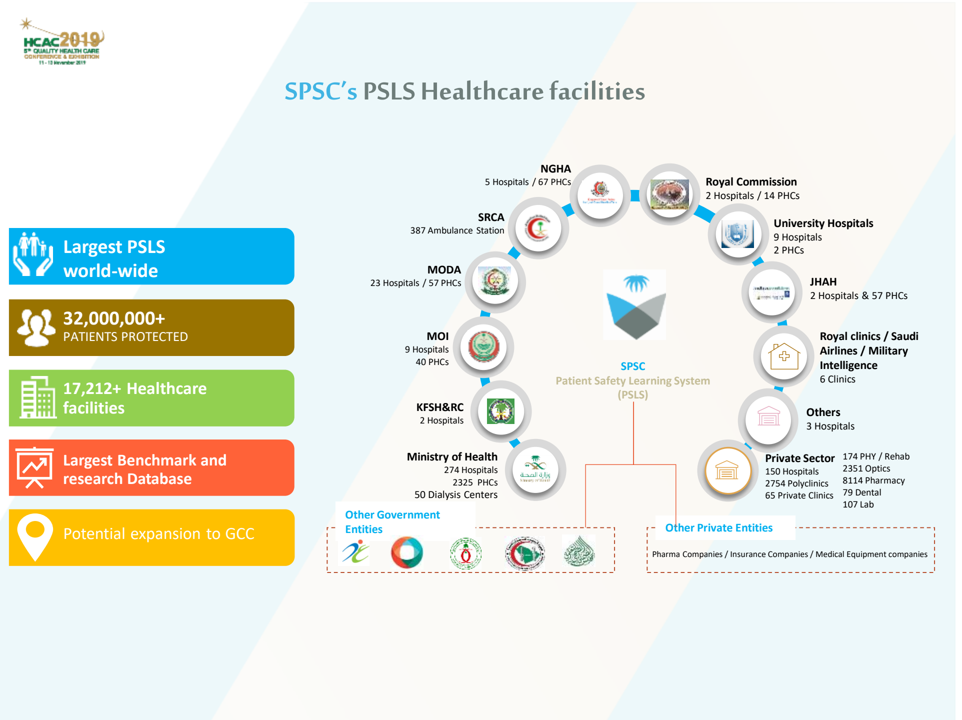

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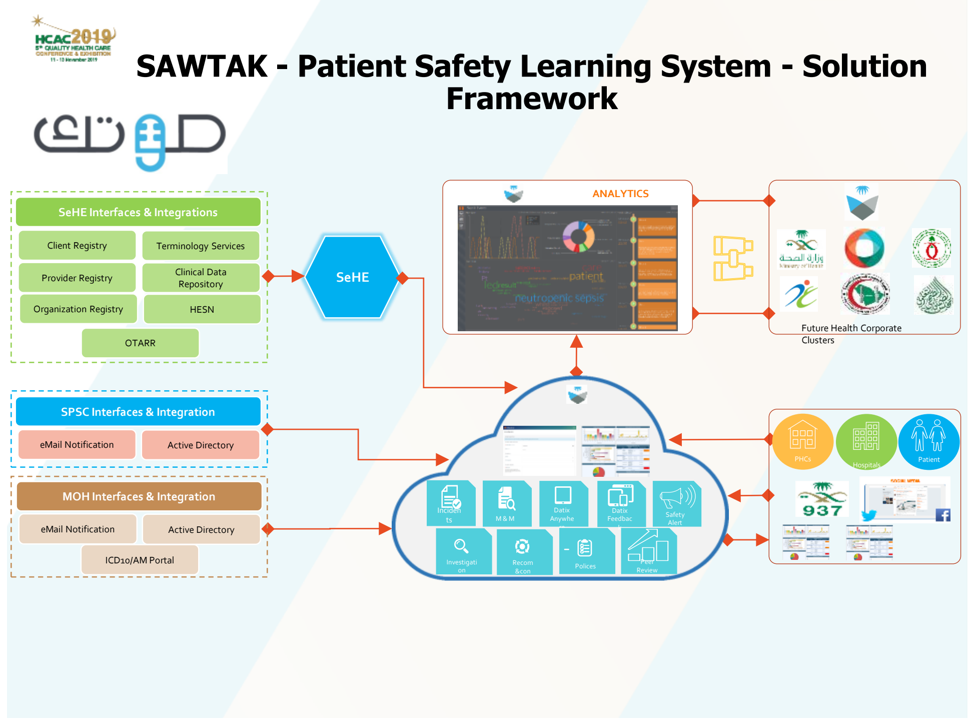

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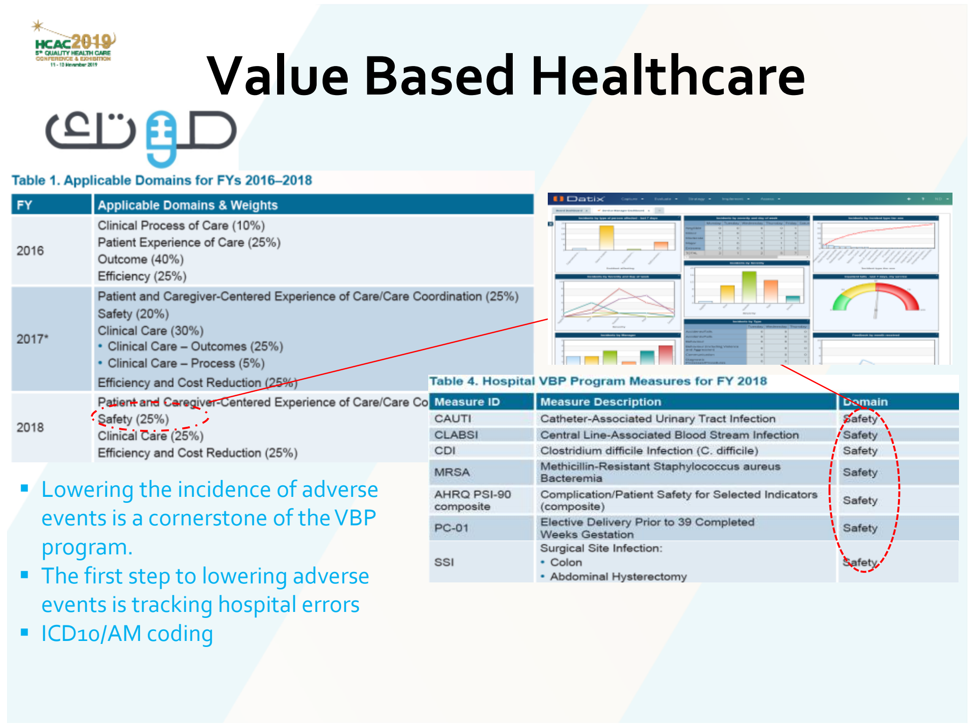

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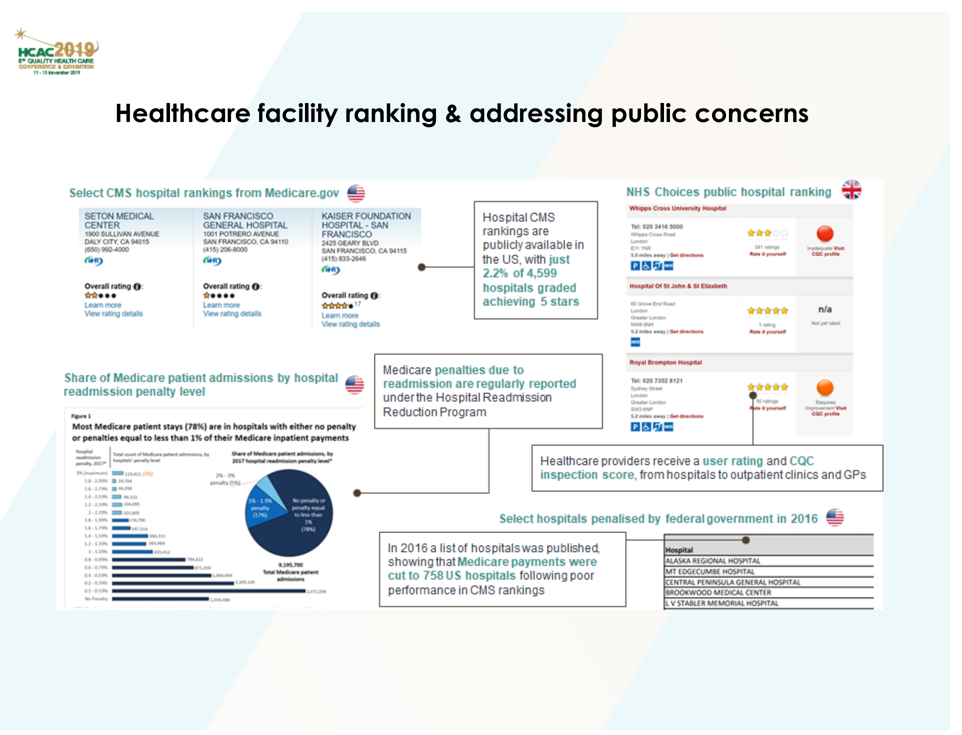

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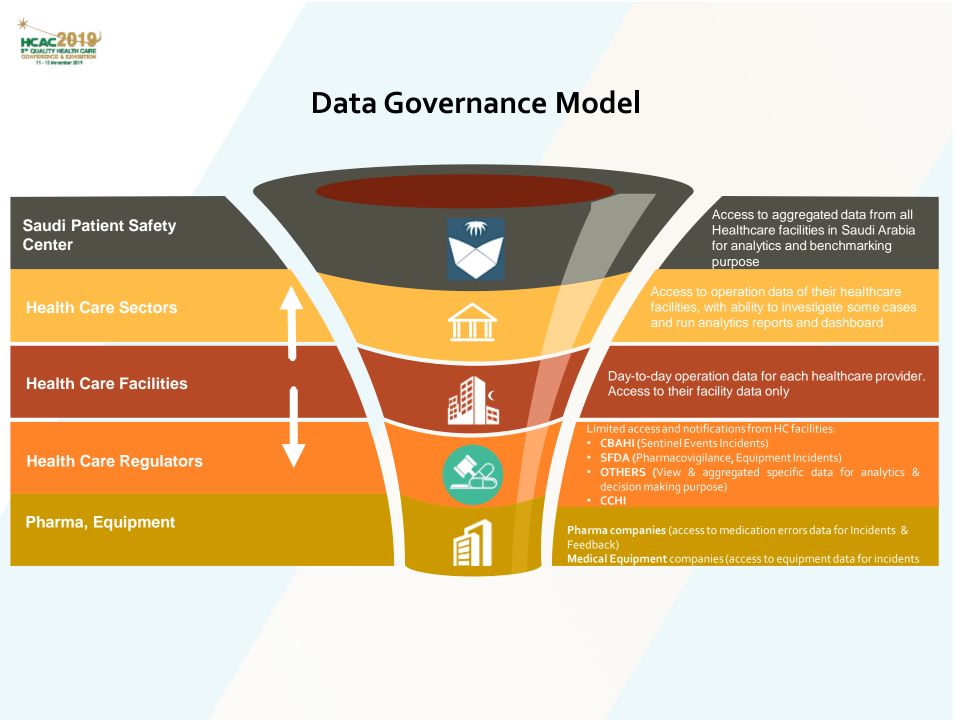

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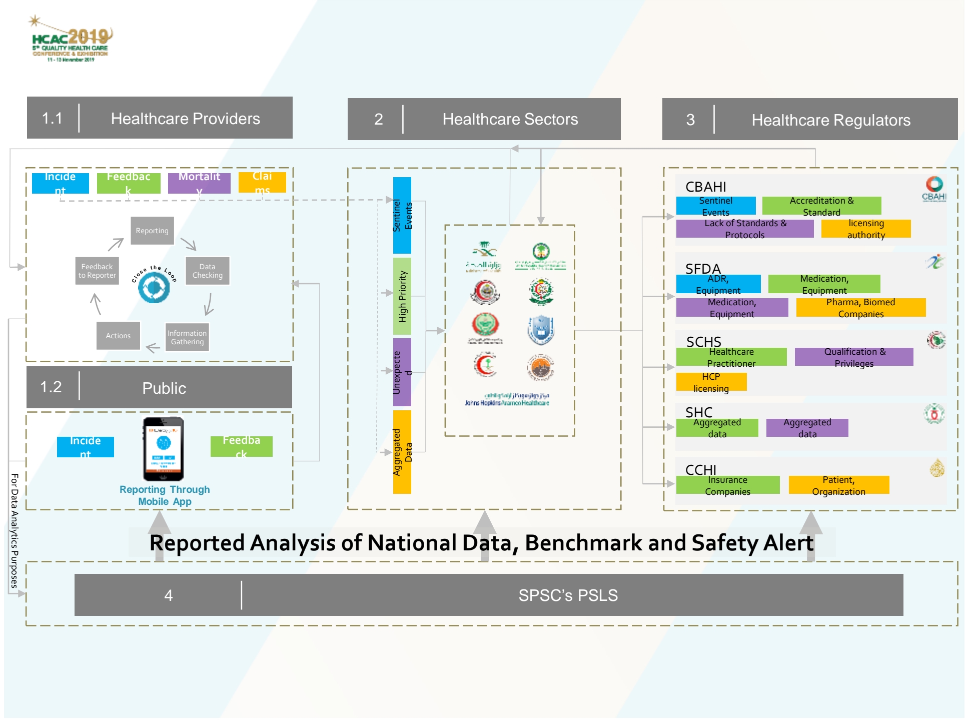

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Thank You