

# Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati Quality & Patient Safety

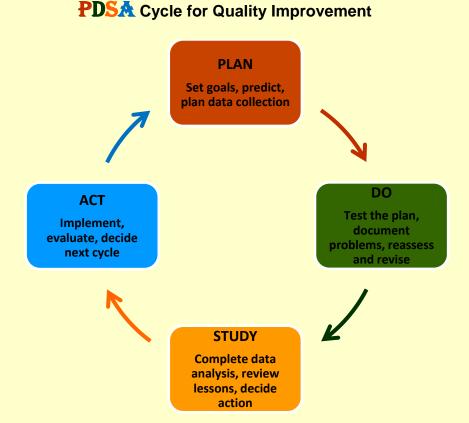
**7**t is envisaged to transform SVIMS into a "High Reliability Organization" and an "Accountable Health System". Towards that path of transformation & global repute, the new Director / Vice Chancellor Dr. T.S.Ravikumar, on behalf of the institute, has laid out a road-map of value based health care. A major step towards this value proposition is emphasis on quality and patient safety as drivers of health system performance. To drive the performance, a programme of SVIMS Quality Council (SQC) is commissioned by the Director for iterative self improvement. Cataloguing, reporting, analyzing and learning from errors has become the lynchpin for quality improvement in health care.

The **SQC** planning process resulted in the formation of nine focus groups and four core groups of workforce consisting of Doctors, Nurses, Administrators, Allied health staff and various other types of employees representing all segments of health system. The focus groups were formed to address: Emergency services, Never events, Medication safety, workforce/workplace safety, fire safety / disaster management, Radiation safety, Hospital Acquired Infections, Blood / injection safety and operating room / interventional areas safety. The four core groups will find sustainable solutions through – Root cause analysis of sentinel events, check lists / communications, accreditations and hospitality services.

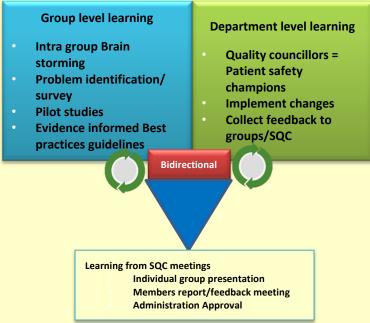


## **Domains of SVIMS Quality Council**

The groups work, on monthly deliverables and share barriers / successes, so as to find culturally competent and substantively sound sustainable solutions. The ultimate goal is to deliver "**Right Care**, to the **Right Patient** by the **Right Teams** in the **Right Place** at the **Right Time**.... *Every Time*".



At SVIMS, a modified PDSA (Plan, Do, Study, Act) cycle is implemented and followed, during & between monthly SQC meetings. This is termed 'Rapid Cycle Bidirectional Learning' as shown below:

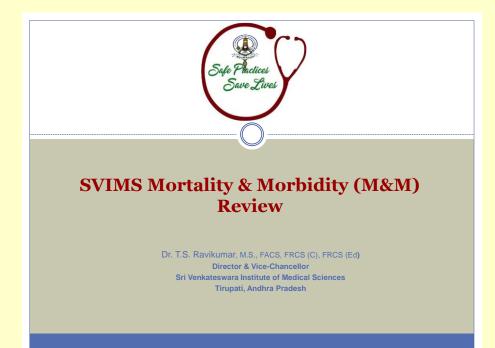


This is conceived as a two month cycle of Intra-group learning, Department level learning & monthly SQC meetings.

## **Tools of Trade**

In order to empower ever healthcare worker and to measure performance against the set goals, SVIMS has developed several Tools of the Trade and analytics. One major tool & process is "Structured Mortality & Morbidity (M&M) Review".

## a) Structured M&M format



## **Structure for M&M**

| RCA                              | Categorization                   |      | QI Plan                |
|----------------------------------|----------------------------------|------|------------------------|
| ESHIKAWA CHART<br>PATENT FACTORS | Preventive harm                  | Yes  | with<br>GANTT<br>Chart |
|                                  | Patient disease                  | yes  |                        |
|                                  | System issue                     | no   |                        |
|                                  | Human factor                     | no   |                        |
|                                  | Knowledge deficit                | None |                        |
|                                  | Cognitive dissonance             | None |                        |
|                                  | Delay in diagnosis               | yes  |                        |
|                                  | Delay in treatment               | No   |                        |
|                                  | Delay in escalation of treatment | Yes  |                        |
|                                  | Error in technique               | No   |                        |
|                                  | Error in treatment               | No   |                        |
|                                  | Communication gap                | No   |                        |
|                                  | Policy issue                     | None |                        |
|                                  | People issue                     | None |                        |
|                                  | Team issue                       | None |                        |

## SVIMS Mortality & Morbidity (M&M) Review "Safe Practices Save Lives"

#### Until 2015

- monthly/ Bimonthly hospital wide mortality meetings
  - 4 cases presented (2 medical/ 2 surgical)

#### December 2015

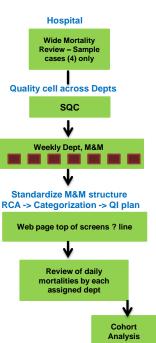
- SVIMS Quality Council (SQC) formed. RCA, patient safety education & categorization of root causes started in practice.
- Order for weekly department-wide M&M; promulgated:

#### April 2016

- − Structure for M&M defined: RCA → categorization of contributing factors →QI plan
- July 2016:
  - Voluntary public reporting of quality/patient safety metrics in website

#### June 2017:

- Daily mortality review with assignments to responsible departments for immediate review & remedial actions.
- January 2018:
  - Monthly analysis of death cohorts: Pranadana cases; NTRVSS cases for further "systems redesign" & "Human factor engineering".



### **Development of Tools & Analytics**

| Tools of Trade  | Analytics<br>(Pre and Post intervention)   |  |
|---|--|--|
| <ul> <li>Check lists, SOPs</li> <li>Rounding tool</li> <li>Structured hand offs</li> <li>Structured communication tools</li> <li>Real case studies/ Scenarios</li> <li>Simulation models</li> <li>Root cause analysis models</li> </ul> | <ul> <li>Hospital patient safety survey</li> <li>Staff competence, knowledge and satisfaction questionnaires</li> <li>Mutual performance assessment</li> <li>Measurable patient related outcomes</li> <li>Patient and care taker's feedback forms</li> </ul> |  |

 b) Root Cause Analysis in Health Care: Tools and Techniques , FIFTH EDITION, Joint Commission Resources, Joint Commission International <u>https://www.jcrinc.com/assets/1/14/EBRCA15Sample.pdf</u> c) In addition to outlining its unique Quality & Patient Safety initiative through 'SQC', SVIMS took a major step on June 12<sup>th</sup> 2016, coinciding with the visit of Hon'ble Health Minister, Dr. Kamineni Srinivas garu, in declaring its accountability & transparency in quality improvement and patient-centered care by announcing voluntary public reporting in four domains on 7/12/16 to start with, and reporting of many other areas to follow sequentially.

The four areas were:

- 1. Code Blue
- 2. Never Events
- 3. Healthcare Associated Infections
- 4. Biomedical Equipment List and Performance Report

On 14.08.2017 in keeping with 71<sup>st</sup> independence day initiatives and coinciding again with Hon'ble Health Minister, Dr. Kamineni Srinivas garu's visit to SVIMS, an additional domain unveiled : Total Hospital Mortality trended over time.

## 5. Mortality Rate: a) Net Death Rate (NDR) b) Gross Death Rate (GDR)

Each of these can be accessed in this quality portal by <u>clicking here</u>.