



HUB and spokes model of Safety Cell Christian Medical College Vellore



Background

120 years old 3500 bedded tertiary care hospital with 8000 OP and 2500 IP patients pre day (Approx)

Hub – Safety Core Group

Sub Safety groups

Departments
(179 DSAs)



How the set objective was achieved?

Coordinate various Departments together was a mammoth challenge

Core group was setup, comprising Associate Director (Admin), Safety Officer, Quality Officer and representatives from Medical, Nursing and General Services.

Sub safety groups (HIC, Radiation, Infrastructure, Security, Fire, Environment etc) brought under the core group

Central Safety team proposed to nominate a middle level staff from each department as Department Safety Advisors (DSAs)

To leave the ownership of safety with departments and safety team to take on the key role as the HUB

“Training the trainer program” to DSAs on various aspects of safety

DSAs in turn train their department staff

Outcome

Able to achieve safety training to all the staff through DSAs

Conduct safety audits / Inspections through DSAs

Able to understand the safety issues on the ground and rectify them

Incidents/Accidents started getting reported which helped to find out the cause for the underlying issue

Able to capture various safety indicators through DSAs and present them in the safety committee

Able to disseminate the new protocols to all staff across the institution



After 7 rounds of Inspection over 4 years it was decided to introspect and find out if there is improvement

Study Design : Quasi experimental

- 5 point scale questionnaire
- 80 Doctors, 22 nurses , 47 Support staff
- 85% response rate.

Department Safety Advisors – Impact on Quality / Safety through Internal Inspection

	Strongly agree	Agree	Neither agree / disagree	Disagree	Strongly disagree
This exercise has helped me to understand the lacunae in my area	48%	41%	5%	1%	6%
It has helped me to understand the support departments	41%	43%	7%	3%	6%
It has helped me to learn about other areas in the hospital	47%	42%	3%	3%	5%
It is a good opportunity to work with a multidisciplinary team	59%	32%	1%	1%	7%
It has helped me to understand the functioning of the hospital	41%	42%	7%	2%	7%
There is a improvement in medical documentation/documentation by clinicians	23%	37%	27%	10%	3%
There is improvement in nursing documentation	37%	38%	16%	4%	6%
There is improvement in awareness of doctors	18%	42%	26%	11%	3%
There is improvement in awareness of nurses	38%	40%	13%	5%	5%
There is improvement in awareness of support staff	25%	44%	21%	7%	2%
Staff awareness on reporting incidents and safety issues has improved	26%	49%	18%	5%	2%
Staff demonstration of their response to emergencies like fire, CPR etc has improved	32%	44%	17%	5%	2%
Safety issues have largely been addressed	28%	50%	13%	8%	1%
The involvement of staff in the areas inspected is good and has improved	28%	52%	12%	6%	2%
Management of equipments has improved	22%	53%	17%	6%	2%
The general maintenance of facility has improved	22%	53%	15%	9%	1%
Cleanliness has improved	22%	51%	18%	8%	1%
Process owners and their accountability have improved	18%	57%	15%	9%	1%
Overall quality of care has improved	27%	49%	15%	7%	1%
Overall this is a very useful exercise	53%	35%	3%	5%	4%

Conclusion: The results suggest that this model has a positive impact on improvement in Quality/Safety