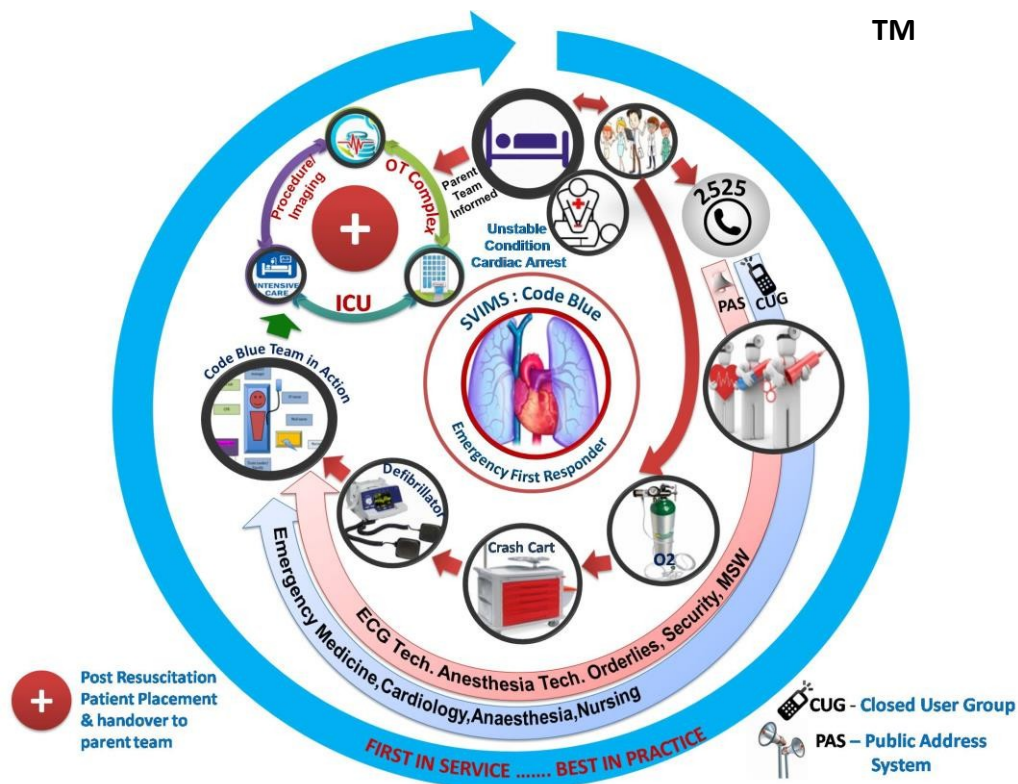


SVIMS CODE BLUE

It is well recognized that preventable deaths occur in hospitals due to 'failure to rescue' a patient with deteriorating condition. When cardiopulmonary arrest or acute deterioration of condition occurs, appropriate resources need to be summoned to resuscitate & rescue the patient. This concept is codified in 'CODE BLUE'. Code blue teams are in existence for many years in health systems of developed countries, but need emphasis in India. Accordingly, under the leadership of SVIMS Director a working group was formed and **CODE BLUE** is launched in June to establish the process. It is formally unveiled on **12-7-2016** by the **Hon'ble Health Minister**.



TM Application for registration of trademark for the logo is submitted and accordingly, unauthorized reproduction of the logo is prohibited.

Code Blue is a comprehensive process design for emergency responder team and response process to rescue patients and other personnel in the hospital premises. When the person sustains cardio pulmonary arrest or experiences sudden deterioration on physiologic condition Code Blue activates the afferent limb of recruiting the necessary personnel and equipments and medicines as well as the efferent limb of the response and post – response management.

Code Blue has been evolved for integration of all the stakeholders i.e., Emergency physician, Cardiologist, Anaesthetist, Emergency Nurse, ICU physician, Orderly for transportation, Pharmacist, as well as Nurse Manager, Security Officer, Medico Social Worker and Telephone Operator while attending to an emergency situation. Necessary resuscitation medicines, gadgets, including defibrillator will be made available with alacrity. Resuscitation training is imparted to all first responders.

Code Blue may be initiated from any in patient or out patient service areas of the SVIMS hospital by dialing 2525 in the intercom. The 2525 call is only for code blue to mobilize emergency responder team and not for other calls.

The process and outcomes will be monitored regularly for iterative improvement.

CPRA Committee

CPRA Committee (formerly known as Code Blue Committee) was constituted and made functional on 12 July, 2016.

Scope:

Identification of Victim, prompt resuscitation as per Basic Life Support (BLS) & Advanced Cardiac Life Support (ACLS) protocols of American Heart Association (AHA) to achieve Return of Spontaneous Circulation (ROSC) and to provide immediate Post-Cardiac Arrest Care.

Purpose:

To ensure the standards of BLS & ACLS through internal Code Blue audits, mock drills, debriefing and continuous Quality Assurance.

CPRA Committee:

Cardiopulmonary Resuscitation Analysis (CPRA) Committee meets once in a month to

- Review Deviations.
- Implement Corrective & Preventive actions.
- Action plan to improve the Quality/Outcome measures.

Members of CPRA Committee:

S.No	Name	Designation	Department	Mobile No
1	Dr. Vanajakshamma	Professor	Cardiology	9493547668
2	Dr. KM Bhargav	Asst. Prof	Medicine	8072784096
3	Dr. Punith Patak	Associate. Prof	Paediatrics	7382114464
4	Dr. Shameem	Asst. Prof	Anaesthesiology	9121021821
5	Dr. P. Subramanyam	Asst. Prof	EMD	9493860490
6	J. Sharada devi	Nur. Supdt.II	Nursing Department	9494891286
7	T. Suseela	Head Nurse	Nursing Department	9441995124
8	N. Ravanamma	Head Nurse	Nursing Department	9666588297
9	Y. Nirmala	Head Nurse	Nursing Department	9491779904
10	L. Haritha	Head Nurse	Nursing Department	9908837224
11	N. Afrin	Staff Nurse	ITC	9347689542
12	M. Sujatha	Staff Nurse	Code Blue	6302257676
13	M. Soni	Staff Nurse	Code Blue	8374213931
14	Gayathri	Staff Nurse	Code Blue	9052773155
15	B. Divyavani	Staff Nurse	Code Blue	9618746903
16	M. Manoj Kumar	Technician	Code Blue	8309554979
17	B. Prasad	Computer Assistant	Computer Section	9849505070
18	N.V.S. Prasad	MSW	MSW	8985555766
19	N.V. Bhaskar	SO	Security	7382659581
20	N. Krishna Reddy	Secretarial Assistant	Cardiology	9704608060

Code Blue Team:

1. Cardiologist
2. Anaesthesiologist
3. Emergency Physician
4. Anaesthesia Technician
5. Code Blue Sisters
6. Medico Social Worker (MSW)
7. Security Officer

Mock Drills:

- Initiated in October-2019.
- Conducting 2 Mock Drills /month.

Audits:

- Initiated in November-2019.
- *Structural Audits:* 02 per month.
- *Process Audit:* 6 to 10 per month.

Average number of calls = 537/annum

Cumulative no. of Alive patients after Code-blue revival discharge as on 31.Dec.2020:

Total Number = 177

Year	Revived	Alive cases as on 31.Dec.2020	Expired cases as on 31.Dec.2020	No communication
2016	45	21	6	18
2017	71	41	9	21
2018	112	41	13	58
2019	107	32	15	60
2020	86	42	44	0

BLS & ACLS AHA training within the Organization:

○ Trained = 630 including

- ✓ Doctors
- ✓ Nurses
- ✓ Staff &
- ✓ Students

	Provider (n=608)	Instructor (n=22)
<i>BLS (n=490)</i>	479	11
<i>ACLS (n=140)</i>	129	11

✓ AHA trained instructors available in the institution = 14

Institutional training given:

- BLS - 680
- ACLS -240

Community CPR training given:65,000

Preventive & Corrective Actions:

- Community CPR
- Training of In-house staff in BLS & ACLS
- Mock drills,
- Internal Audits
- Debriefing

Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati

CODE BLUE DATA

June 2016 – December 2016

PERIOD (June 2016 to Dec 2016)	NUMBER OF CALLS			OUTCOMES	
	Total	Initial	Repeat	Survived	Died
June	33	29	4	6	23
July	58	55	3	12	43
August	35	33	2	8	25
September	33	25	8	3	22
October	33	30	3	6	24
November	28	27	1	3	24
December	39	36	3	7	29
Total	259	235	24	45	190

Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati

CODE BLUE DATA

January 2017 – December 2017

PERIOD (Jan 2017-Dec 2017)	NUMBER OF CALLS			OUTCOMES	
	Total	Initial	Repeat	Survived	Died
January	41	38	3	5	33
February	39	36	3	6	30
March	36	35	1	5	30
April	46	36	10	2	34
May	43	38	5	5	33
June	34	31	3	5	26
July	41	40	1	6	34
August	49	44	5	4	40
September	45	39	6	2	37
October	67	58	9	12	46
November	70	63	7	13	50
December	53	45	8	6	39
TOTAL	484	429	55	71	369

Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati

CODE BLUE DATA

January 2018 – December 2018

PERIOD (Jan 2018-Dec 2018)	NUMBER OF CALLS			OUTCOMES	
	Total	Initial	Repeat	Survived	Died
January	45	36	9	6	30
February	49	34	15	0	34
March	65	56	9	11	45
April	46	46	0	18	28
May	61	58	3	8	50
June	56	56	0	16	40
July	52	47	5	6	41
August	64	57	7	7	50
September	56	53	3	14	39
October	73	67	6	8	59
November	54	51	3	8	43
December	70	66	4	10	56
TOTAL	691	627	64	112	515

Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati
CODE BLUE DATA
January 2019 – December 2019

PERIOD (Jan 2019-Feb 2019)	NUMBER OF CALLS			OUTCOMES	
	Total	Repeat	Initial	Survived	Died
January	60	03	57	09	48
February	48	01	47	11	36
March	52	02	50	06	44
April	53	04	49	11	38
May	59	04	55	10	45
June	50	03	47	06	37
July	52	09	43	02	41
August	56	05	51	07	44
September	74	10	64	12	52
October	73	--	73	11	62
November	60	01	59	10	49
December	74	08	66	12	54
TOTAL	711	50	661	107	554

Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati
CODE BLUE DATA

January 2020 – December 2020

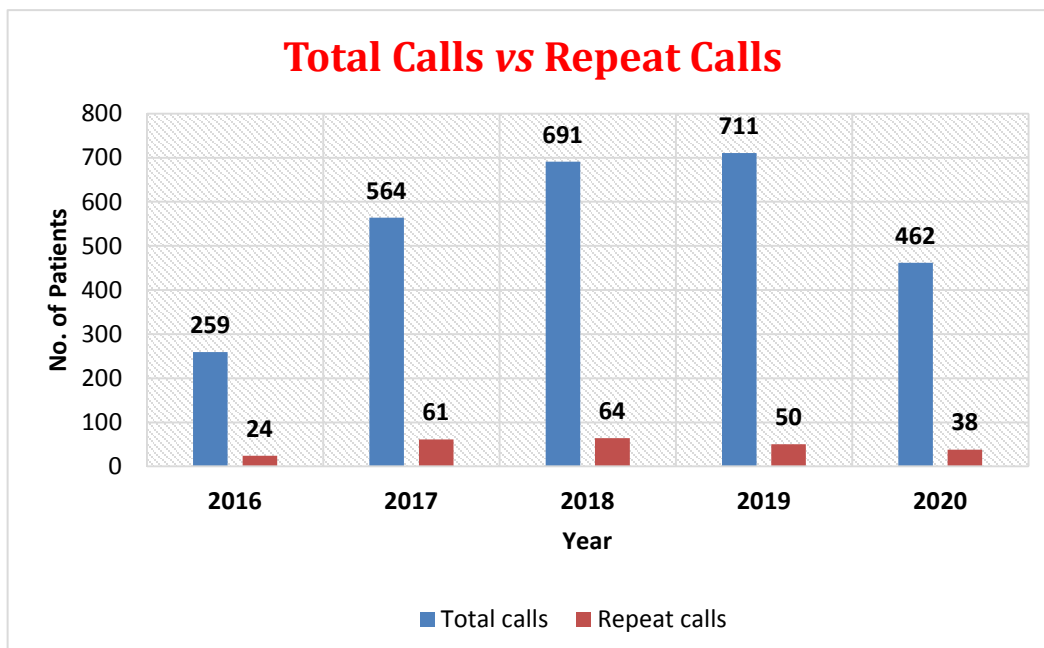
	Total	Repeat	Initial	Survived	Died
January	71	04	67	17	50
February	71	07	64	09	55
March	96	12	84	19	65
April	27	01	26	08	18
May	16	0	16	03	13
June	39	01	38	06	32
July	25	0	25	07	18
August	07	0	07	01	06
September	08	0	08	02	06
October	14	0	14	03	11
November	42	06	36	05	31
December	46	07	39	06	33
TOTAL	462	38	424	86	338

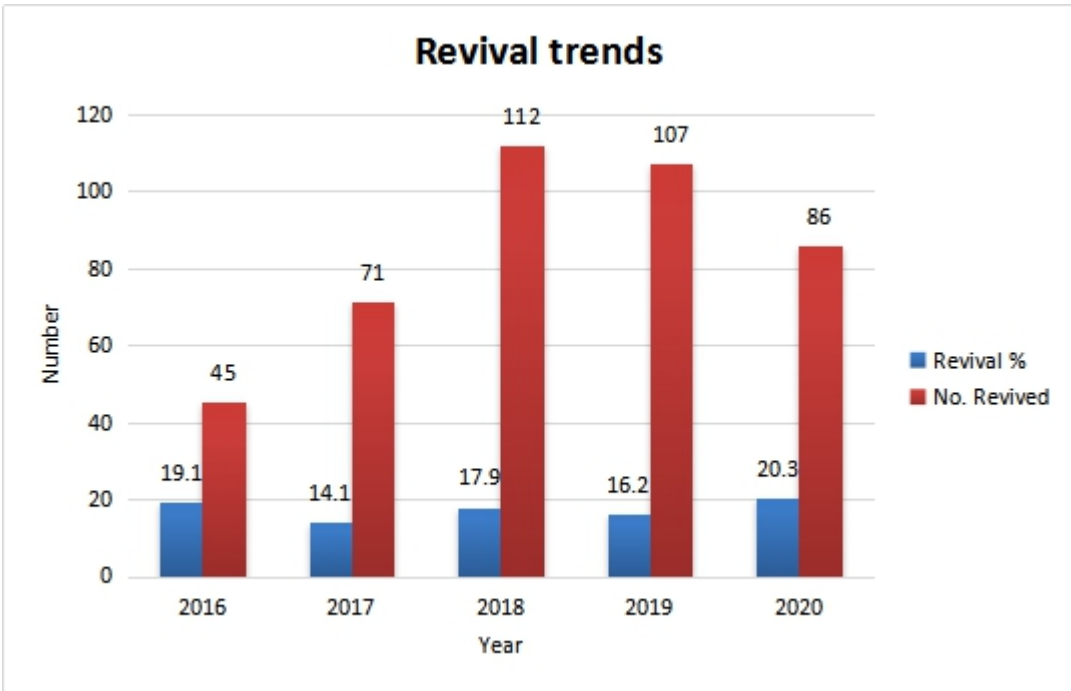
STATISTICS

<i>Observation Spell</i>	Number of Calls	Initial	Repeat	Died	Revived (%)
<i>July-Dec 16</i>	259	235	24	190	45 (19.1%)
<i>Jan-Dec 17</i>	564	503	61	432	71 (14.1%)
<i>Jan-Dec 18</i>	691	627	64	515	112 (17.9%)
<i>Jan-Dec 19</i>	711	661	50	554	107 (16.2%)
<i>Jan-Dec 20</i>	462	424	38	338	86 (20.3%)

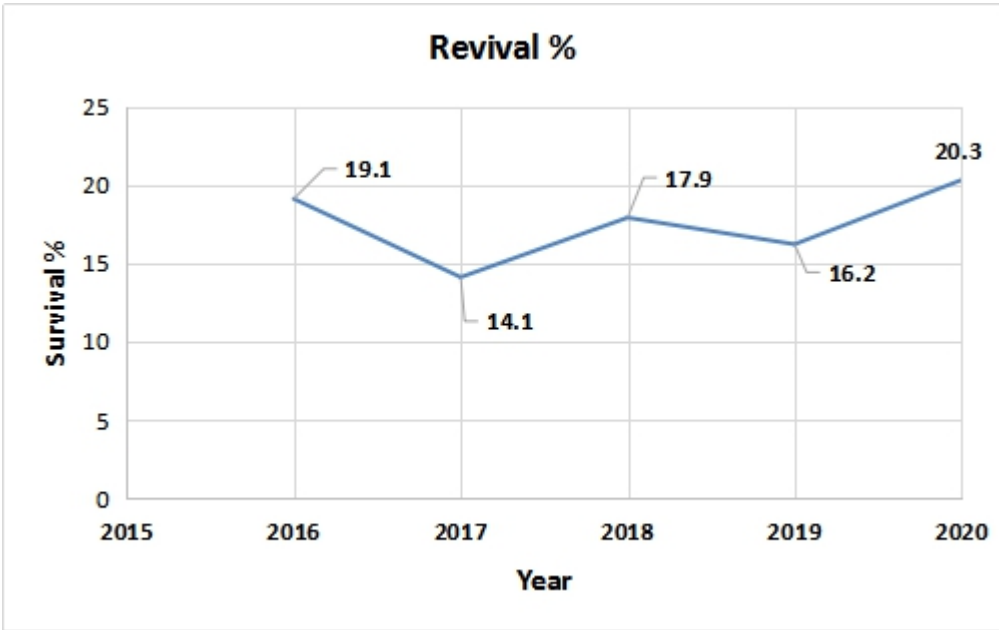
Improving the effectiveness and long term survival analysis after Code Blue

SVIMS is currently performing 'Analysis of Code Blue outcomes in Long term Survivors'. SVIMS is also conducting audit of the effectiveness of resuscitation as well as instituting 'Debriefing' after each Code Blue call. Further, all Code Blue responders are being trained in BLS/ACLS protocol of American Heart Association, through SVIMS International Training Center, designated by AHA.





REVIVAL PERCENTAGE



CME on CPR conducted on 23.Dec.2019

- Organized with an objective to understand the common mistakes that are being done and to give practical knowledge regarding correct CPR practices.
- Around **250 members** were attended.
- **2 Code Blue simulation practical** sessions were conducted.
- **6 topics were presented** by various members of the CPRA committee.

Topic	Speaker
Assessment of Cardiac Arrest	Dr. P. Subramanyam
High Quality CPR	Miss. N. Afrin
Air way Management	Dr. S. Shameem
Team Dynamics	Dr. K.M. Bhargav
Paediatric life support	Dr. P. Punith
Near Death Experience in CKD Patients	Dr. P. L. Aishwarya





