

***Developing self
sustainable
blood services in
the state***

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Blood bank scenario in the state of Odisha



- Total number of blood banks functioning in the state: 81
 - Govt blood bank....55
 - Red Cross blood bank....01
 - Charitable trust....07
 - Public sector blood bank....08
 - Private sector blood bank....10
- (Number of blood component separation units....14)

Blood collection status in the year 2015



- Total collection ...4,01,226
- Voluntary collection...2,87,966
- Exchange...1,13,260
- Voluntary blood collection in %...71.77%
- Number of VBD camps...2,823
- Blood collection from outdoor camp...1,91,631

Approach of state Govt.



- PAST:
- Previously Govt was focused on the availability of safe blood units after TTI screening through voluntary /replacement donation with discouragement of professional/paid donors

Present approach



- In line with the National Blood Policy, the state formed a Perspective State Action Plan for Strengthening of Blood Services
- A 'State Task Force Committee' under state NHM has been constituted for
 - planning,
 - implementation,
 - monitoring
 - review of the activities relating to Blood Services in the State..

Importance to specific areas in the Blood Banks by the state



- Quality improvement
- Man power strengthening
- Voluntary blood donations increment
- NAT testing for TTIs screening
- Hemovigilance programme
- Adoption of automation process
- Improvement of e-Blood banking
- Implementation of External Quality Assessment Scheme(EQAS)

Quality improvement in the blood banks



- Calibration of major equipments of Blood Banks undertaken
- Steps for establishment of 07 more BSCUs in the Blood Banks in the state
- Additionally 07 Walk-in-Coolers provided to increase the storage capacity
- Blood storage centers at all FRUs of the state are being opened to ensure greater accessibility of blood

Man power strengthening with NHM support



- Additional 69 Lab Technicians have been placed at majority Blood Banks
- Two manpower support i.e one Consultant- Blood Service and one Programme Associate for State Blood Cell
- For smooth functionalisation of e-blood bank system, 70 Data Entry Operators have been engaged

Initiatives for increase in Voluntary blood donations



- Nine blood collection vans processed for 09 major blood banks
- Initiative taken to provide free bus passes to regular blood donors.
- Refreshment for the donors has been raised from Rs 25 to 60
- Annual Calendar for holding of VBD camps is being prepared by blood banks

VBD cont....



- Distinguished camp organizers are being felicitated
- District/State level training of motivators and awareness campaigns for the general public are being organized
- Every donor is provided with a cap, ID card and badge after donation.

Adoption of molecular technology for TTIs screening



- To reduce window period in diagnosis, Nucleic Acid Amplification Polymerase Chain Reaction (NATPCR) technology has been adopted
- Full cost of the NAT testing charges is taken care of by State Govt which is a first-time multi-centric turn key project. Room, electricity with back-up provided by the centers

Odisha NAT Implementation Programme



Physical Infrastructure

- Labs, civil Infrastructure, Lab and Instrumentation

Human Resource Training:

- Phlebotomy for NAT sampling
- Technical Staff for running the system

Data Management:

- Sample Identification and Management
- Dashboard for Data Compilation and Monitoring

Sample Identification

Bar code developed as per requirements set by SBTC



Automated Reporting Dashboard



Odisha NAT Project Report Dashboard

Summary of result

- Month wise donor counts
- Month wise NAT yield
- Graphical representation

Select Blood Bank

Blood Bank

SCB Medical College Hospital, Cuttack (54)

NAT test performed with cobas TaqScreen MPX v2.0 kit on cobas s201 system

Summary of Results

	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year 2016
No. of donor sample	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
NAT Yield	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!

Search for Results (for samples from the selected Blood Bank)

Period

Collection

Donor ID

Result

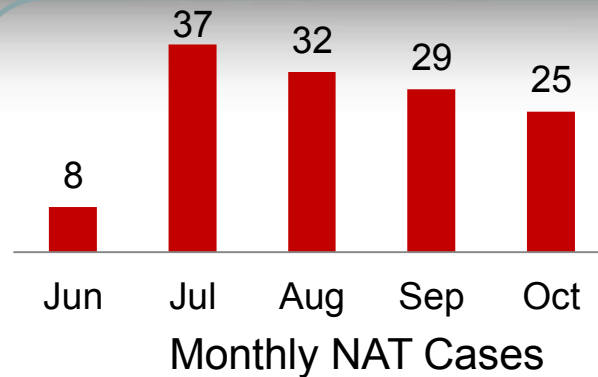
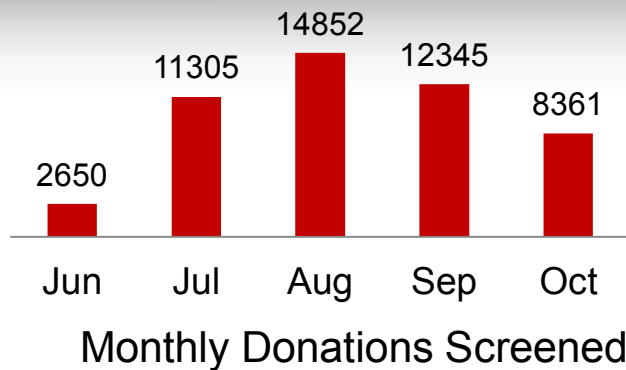
Reactive (HIV)

Search for individual donor sample result

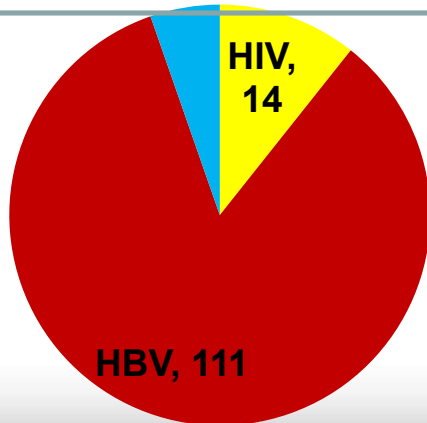
- Data sent through email and sms to authorised blood bank officials after each run

NAT Positive Analysis

State Data (up to 31st October, 2016)



HCV, 6



Type of infection detected

- 49513 samples screened on NAT PCR
- 131 infections detected
- 393 lives saved
- NAT yield rate of 1:332

NAT RESULT IN DIFF. CENTERS



Serial no	Blood bank	Sample nos.	HIV	HBV	HCV	Total yield
1	Capital Hosp	7397	2	9	0	11
2	BMC	2368	1	6	0	7
3	SCB	6103	0	10	0	10
4	CRCBB	11433	3	18	0	21
5	MKCG	8236	5	54	6	65
6	VSS	5115	3	14	0	17
	Total	49513	14	111	6	131

Hemovigilance programme



- Around 50 Blood Banks have been linked with National Institute of Biologicals (NIB), Noida for Haemovigilance Programme.
- Are reporting the transfusion reactions in the recipients and adverse reactions in the donors.

Adoption of automation process



- Automation in grouping & cross matching of patient samples at blood banks in reagent rental mode is in the pipeline.
- This will be first started in the major blood banks which are issuing more than 10,000 blood units per annum

Improvement of e-Blood banking



- All Blood Banks have been connected with e-blood banking systems to ensure live data of blood stocks
- The detailed data of rare blood group donors available in the e-blood bank site
- Registration of camps and the camp calendar maintained online through e-blood bank for citizen information.

Implementation EQAS



- Blood Bank officials and technologists undergone training programme at NIB to ensure enforcement of standards for blood and blood products,
- State Govt has planned to link with NIB for EQAS

Miscellaneous steps...



- Provision of free blood for patients of JSSK(Janani Shishu Suraksha Karyakram), accident , thalassemia ,sickle cell, hemophilia, HIV & inmates of jail.
- Formulating SOP for the private blood banks
- Centralized procurement of blood bags, antisera, ELISA & rapid kits
- Instruction to all blood banks for submission of minutes of the managing & hospital transfusion committee.

Training initiative



- To improve the quality of transfusion services the training of Mos, LTs & SNs on Blood Bank technologies are conducted for the state of Jharkhand and Odisha in collaboration with NACO & OSACS.
- 80% blood bank personnel of Jharkhand have been trained
- Planning has been done to train all the personnel by March,2017

STEPS FOR NEAR FUTURE



- Additionally to set-up 34 more BCSU in 05 years
- To start MD, Transfusion Medicine course in two MCHs & increase the existing no of PG students in one MCH
- To encourage research in transfusion services

STEPS CONT..



- Blood disorders to be included in the disease list of Rashtriya Swasthya Bima Yojana & Odisha State Treatment Fund.
- Establishment of 4 nos. of Regional Blood Transfusion Centers in the State (3 MCHs & Capital Hosp)
- Development of comprehensive IEC package for mobilization of blood donors

PRIORITY AREAS



- Prevalence of rare blood groups in the State
- Antibody screening & antibody identification in multitransfused patients like Thalassemia
- Evaluation of Red Cell antibodies in pregnant women
- Evaluation of Transfusion reactions to Blood products & steps to minimize these

VISION.....



- Strengthening of transfusion services by enhancing the VBD with component separation for availability of adequate no of safe, quality blood components without replacement to the needy patients.

• THANK YOU

