

# Programming Leadership and Advocacy with Networking, Educational Training and Translational Research in AMS- **PLANET-AMS**

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## BACKGROUND

Manipal-bioMerieux Center of Excellence in Antimicrobial Stewardship is a multidisciplinary programmatic action plan functioning at Kasturba Medical College, Manipal which is a premiere tertiary health care center providing state of the-art-medical facilities and education.

## OBJECTIVES

- Improve laboratory workflow and promote diagnostic stewardship in the hospital
- Impart education and awareness about antimicrobial resistance and stewardship (AMR/AMS)
- Create networks and promote AMS implementation initiatives

## METHODS

- Customisation of information technology (IT) for local healthcare needs in diagnostic stewardship and AMS
  - Routine analysis of data from hospital and laboratory
  - Ensuring quality improvement in overall practice
- Case-based interactive sessions in association with major governing body for Indian medical professionals.
- Facility-specific AMS interventions
- SWOT analysis for behavioural change intervention among prescribers.
- Establishing advanced AMR testing laboratory

## RESULTS

### Laboratory KPIs and communication

- Optimization of blood culture workflow
- Average time to final reporting – 36 hrs
- Facility specific test utilization
- Facility specific analysis of contamination, volume, isolate and MDR tracking
- Communication to IPC team
- Facility specific antibiogram and antibiotic policy

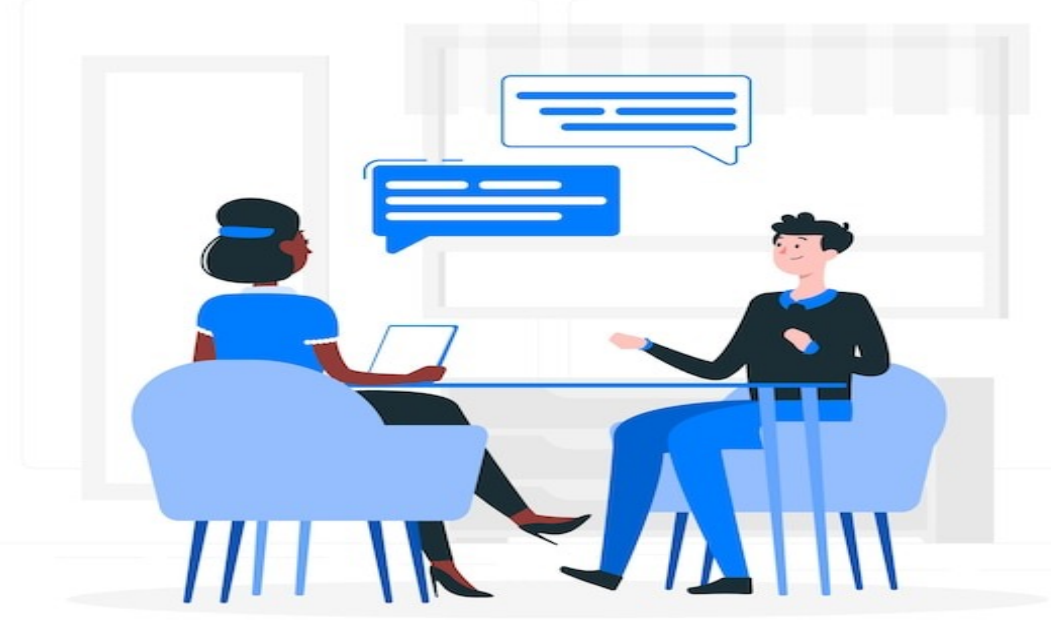
### Quality improvement programs

- Initiated as facility-specific interventions focusing on high-risk patients. These program are implemented for:
  - Chronic Kidney Disease patients with bacteremia
  - Hemato-malignancy patients
- Educational Modules for healthcare practitioners are an integral part of these QI programs

### Education and awareness activities through Indian Medical Association (IMA)

List of Events	Target Audience	# of participants
Capacity Building Workshop on AMS for Clinical Pharmacists	Clinical pharmacists and PharmD interns	50+
Enhancing Stewardship Competencies for Clinical Microbiologists	Microbiologists, Critical Care Physicians	50+
Smart Antibiotic Use	IMA Active members (Prescribers)	150+
Information technology workshop for Antimicrobial Stewardship	Microbiologists, laboratory technicians	30+
Antimicrobial Stewardship for Kasturba Hospital through Education, Leadership and Practice (ASK-HELP)	Postgraduates, Clinicians, Surgeons, Gynecologists	100+

### SWOT analysis completed



### Advanced AMR testing laboratory



## DISCUSSION

We made significant progress in:

- Improved diagnostic test seeking behaviour before antimicrobial treatment for selected patient cohorts
- Improved communication between prescribers and laboratory for optimum antimicrobial therapy management
- Evidence informed management of bacteremia in high-risk patients (CKD, Hemato malignancy)
- Establishment of networks among key stakeholders to develop focused interventions

## CONCLUSIONS

Our activities are focused on two pillars, diagnostic and antimicrobial stewardship through capacity building and education. The incorporation of IT in laboratory workflow has a major impact on the laboratory supported antimicrobial therapy optimization. Need based educational programs are developed after baseline assessment of the prescribers and clinical pharmacists. The experience so far has given sufficient momentum to expand the AMS activities to the secondary care hospitals and other smaller establishments.

## REFERENCES

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## DISCLOSURES

All authors declare no conflict of interest.