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to



Increasing demand on diagnostic services should be an incentive for a more careful consideration of the function and requirements of this rapidly growing service in the hospital. As in planning of any other specialised service, persons with expertise and experience in the laboratory field are needed to work as a team with the administrator and the architect, to develop a written programme for the laboratory.

Development of the functional programme depends mainly on the current and projected number of tests required to be carried out, which in turn will depend on the number and types of patients to be served. Other factors to be considered are the types of tests and the style of working, like manual system and the extent of mechanical or automated systems. This input is translated into effective floor plans, areas, spaces, equipment, organisation and staffing. Functional planning covers the following activities. 1.

Determining approximate section wise workload. Available empirical evidence and historical data tempered with experience will lead to anticipated workload.

2. Determining services to be provided (for inpatients/ outpatients, for other departments, smaller hospitals and private practitioners). 3. Determining area and space requirement to accommodate equipment, furniture and personnel in technical, administrative and auxiliary functions. 4.

Dividing the area into functional units, viz. haematology, biochemistry, microbiology, histopathology, urinalysis, etc. 5. Determining the number of work stations in each functional unit/division and deciding the linear bench

space allotted for each work station. 6. Determining the major equipment and appliances in each unit. This is generally classified into: i.

Technical equipment peculiar to certain work stations ii. Other equipment and appliances e. g. (refrigerators, hot air ovens, centrifuges) that can be jointly used by different work stations or units. 7. Determining the functional location of each section in relation to one another, from the point of view of flow of work and technical work considerations. 8.

Identifying the electrical and plumbing requirements for each area/work station. Independent electric circuits are required for electronic equipment items. Location of sinks and wash areas are vital for efficient performance of work stations. 9. Considering utilities, viz.

lighting, ventilation (forced or normal exhaust, air-conditioning and air hygiene) and isolation of equipment or work stations. 10. Working out the most suitable laboratory space unit, which is a standard module for work areas. A standard module facilitates rearrangement of work units with least disruption and minimal structural changes.