Point-of-care testing in hospitals and primary care.

Abstract:
Many medical laboratory tests can now be done near the patient (point-of-care testing, POCT), ranging from basic blood glucose measurement to complex coagulation testing. Switching from conventional laboratory testing to POCT shortens the time to decision-making about further testing or treatment, as delays are no longer caused by specimen transport and preparation, and the test results are rapidly available at the point of care. Better medical outcomes and lower costs may ensue. Selective literature review. The available methods and equipment enable persons not specially trained in laboratory medicine to perform high-quality laboratory testing at the point of care, under certain conditions. Before POCT is introduced in a hospital or outpatient practice, a cost-benefit analysis should be performed, because the introduction is costly and requires a certain amount of organizational work especially for quality management. The potential medical and economic benefits should be assessed individually in each case. POCT for certain applications is a useful complement to conventional laboratory testing. The future utilization of POCT will depend not only on technical advances, but also on developments in costs and reimbursement.