

	Page		Page
Summary	3	Quality of Measurement	30
General Findings	3	Diagnostic Value	31
Product and Industry Characteristics.	3	Clinical Efficacy.. . . .	33
Quality of Measurement	4	Cost Effectiveness	33
Diagnostic Value.	4	Efficiency	34
Clinical Efficacy	4	References.	35
Economic Efficiency.	4		
Cost Effectiveness	4		
Cardiac Enzymes	5		
Introduction	5		
The Problem	5		
Scope of the Case Study.	6		
Description of Multichannel Chemistry			
Technology	7		
Overview of the Industry.	7		
Continuous-Flow Analyzers.	8		
Discrete-Sample Analyzers	10		
Centrifugal Fast Analyzers	12		
Design Issues and Tradeoffs	12		
Future Trends	13		
Framework for Cost-Effectiveness			
Evaluation	13		
Efficiency and Cost Effectiveness	13		
Economic Efficiency.	13		
Cost Effectiveness	16		
Concluding Observations Based on the			
Conceptual Framework	21		
Economics of the Multichannel Analyzer.	22		
Overview.	22		
Review of Cost Data	22		
Hypothetical Analyses of Efficiency.	25		
Fixed Costs of Production and the Rate			
of Innovation	26		
Induced Costs	26		
Financial Incentives	26		
Cost Effectiveness of Cardiac Enzymes in			
Diagnosis of Myocardial Infarction:			
A Structured Review	27		
Overview.	27		
Clinical Properties of the Cardiac			
Enzymes.	28		
Structure for Decision Analysis	29		

Table No.	Page
1. Multichannel Analyzers Produced by Three Major Manufacturers	8
2. Chemical Determinations Available on Technicon, Hycel, and Du Pont Multichannel Analyzers	9
3. Reagent and Consumable Prices for Two Technicon Analyzers.	23
4. Direct Nonlabor Costs for Selected Analyzers	24
5. Sensitivity and Specificity of Cardiac Enzymes, Isoenzymes, and EKG in the Diagnosis of Myocardial Infarction.	31
6. Results of Galen, et al., on Joint Occurrence of Elevated CPK-MB Isoenzyme and Flipped LDH Isoenzymes	32

Figure No.	Page
1. Cost Envelope for Three Alternative Clinical Chemistry Technologies.	14
2. Hypothetical Analysis of the Cost-effective Level of Testing.	17
3. Analysis of Cost Effectiveness for a Test with Multiple Uses	20
4. Composite Analysis of the Cost-effective Level of Testing.	21
5. Hypothetical "Breakeven" Analysis for Multichannel Analyzer	25
6. Structure of Decision Analysis for valuation of Enzymes in Diagnosis of Myocardial Infarction.	29