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Preparing for the American Board
of Pathology (ABPath)
Examination of Fundamental
Knowledge and Skills

Management and Informatics

Content Specifications



3 Overview:

4 General Management and Informatics Content Specifications

5 This guide outlines the content that may appear predominantly on the American Board of Pathology
6 Primary certification exams. It provides a framework based on the knowledge and skills typically covered
7 in residency training, but also discloses more advanced topics (i.e., advanced practitioner) for individuals
8 who would like further topics to study in this area.

9 Key to Designations:

10 C = Core/Foundational Knowledge

11 AR = Advanced Resident Knowledge

12 F = Fellow/Advanced Practitioner Knowledge

13
14 The information on the Primary exams related to management and informatics assesses the knowledge,
15 judgment, skills, and abilities that are expected of a graduating resident. Subspecialty-specific material
16 is included in the subspecialty content specifications. Candidates should use this guide as a reference for
17 preparing for certification and professional practice.

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33	1. Quality Management	
34	a. Preanalytic Risks and Risk Mitigation	C
35	b. Analytic Risks and Risk Mitigation	
36	i. Ongoing Quality Control	C
37	ii. Verification and Validation	AR
38	c. Postanalytic Risk and Risk Mitigation	
39	i. Communication (e.g., Laboratory Reports, Critical Values)	C
40	ii. Interpretation	
41	1. Reference Range Determination	C
42	2. Test Performance Characteristics	C
43	(e.g., Sensitivity, Specificity, PPV, NPV, etc.)	
44	3. Advanced Interpretations	AR
45	d. Oversight of Quality	
46	i. Guidelines	C
47	ii. Test Utilization / Laboratory Stewardship	C
48	iii. Quality Assurance, Management, and Improvement	AR
49	iv. Process and Workflow Management	AR
50	v. Management of Non-Conformances, Exceptions, and Incidents	AR
51	vi. Change Control	F
52		
53	2. Safety	
54	a. Patient Safety	
55	i. Risk Classification	
56	1. Preanalytic Hazards	
57	a. Identification Error	C
58	b. Ordering Error	C
59	2. Analytic Hazards	
60	a. Interference	C
61	b. Interpretive Error	C
62	3. Postanalytic Hazards	
63	a. Communication Failure	C
64	ii. Risk Monitoring	
65	1. Sentinel Events	AR
66	2. Near Misses	AR
67	iii. Risk Mitigation Measures	
68	1. Failure Mode and Effects Analysis	AR
69	2. Root Cause Analysis	AR
70	3. Human Factors / LEAN Design	F
71	b. Employee and Environmental Safety	
72	i. Risk Classification	
73	1. Ionizing Radiation Hazard	C
74	2. Biological Hazard	C
75	3. Electrical Hazards	C

76	4. Fire	C
77	5. Workplace Violence	C
78	6. Physical Hazards	C
79	7. Chemical Hazards (MSDS)	C
80	8. Other Risks to Employees and Environments	C
81	9. Automotive Accidents (e.g., Specimen Transport Drivers)	F
82	ii. Risk Monitoring	AR
83	iii. Risk Mitigation Measures	AR
84	c. Disaster Management	F
85		
86	3. Human Resources	
87	a. Employees	
88	i. Job Descriptions	F
89	ii. Hiring and Termination	F
90	iii. Initial Orientation and Training	F
91	iv. Ongoing Education and Training	F
92	v. Competency and Performance Assessment	F
93	vi. Other Employees (e.g., HR, Employees)	F
94	b. Independent Contractors	F
95	4. Customers	
96	a. Types of Customers	F
97	b. Customer Satisfaction	F
98	c. Marketing	F
99	d. Communication with Customers	F
100	5. Suppliers	
101	a. Supplier Qualifications	F
102	b. Types of Supplies	F
103	vii. Analytical Equipment	F
104	viii. Kits, Reagents, and Consumables	F
105	ix. Blood and Blood Products	F
106	x. Management of Supplies	F
107	c. Supplier Agreements	F
108	d. Inventory Management	F
109	e. Recalls	F
110	6. Finance	
111	a. Accounting and Financial Statements	AR
112	b. Management of Expenses	F
113	xi. Management of Unit Costs	F
114	xii. Utilization / Demand Management	F
115	c. Management of Revenue	
116	xiii. Coding, Billing, and Revenue Cycle	AR

117	xiv. Payment Models	F
118	1. Individual Service Based (i.e., Fee for Service)	F
119	2. Episode Based	F
120	3. Capitated / ACO	F
121	xv. Major Payors	F
122	1. Federal Government	F
123	2. State Government	F
124	3. Private Insurers	F
125	4. Individuals	F
126	d. Management of Capital	F
127	7. Business Strategy	
128	a. Long Term Strategic Planning	F
129	b. Business Contracting and Negotiating	F
130	c. Business Models	F
131		
132	8. Laws and Regulations	
133	a. Laboratories and Testing	
134	i. CLIA	C
135	ii. CAP	C
136	iii. Proficiency Testing (PT)	C
137	iv. FDA Testing Regulations	C
138	v. Regulation of Laboratory Financial Practices	AR
139	vi. Public Health Reporting	AR
140	vii. Joint Commission	AR
141	viii. ISO 15189	F
142	b. Physician Relations (e.g., Specific Laws [i.e., Stark, Anti-Kickback])	AR
143	c. Environmental and Worker Safety (e.g., OSHA)	C
144	d. Regulation of Information and Information Management (e.g., HIPAA)	C
145	e. Tort Law (e.g., Malpractice)	C
146	f. Employment Law	F
147	g. Law Pertaining to Charitable (i.e., Non-Profit) Organizations	F
148	h. Other Bodies of Law and Regulation (e.g., HPDB, OIG)	F
149		
150	9. Professionalism and Ethics	
151	a. Medical Profession – Professionalism	
152	i. Autonomy	C
153	ii. Beneficence	C
154	iii. Integrity	C
155	iv. Non-Maleficence	C
156	v. Conflict of Interest	C
157	vi. Informed Consent	C
158	vii. Confidentiality	C

159	viii. Justice	C
160	b. Other Ethical Systems	
161	i. Biomedical Ethics	
162	1. Patient Care	C
163	2. IRB / Research / Belmont Report	C
164	10. Informatics	
165	a. The Nature of Information	
166	i. Tracking (e.g., Barcoding)	C
167	ii. Coding (e.g., SNOMED, ICD10, CPT)	AR
168	iii. Types of Data	AR
169	iv. Data Architecture and Management (i.e. Databases)	F
170	b. Electronic Information Systems	
171	i. Types of Systems	
172	3. Laboratory Information Systems (LIS)	
173	a. Use of, Search Functions, Various Systems/Modules	C
174	b. Middleware, Data Integrity, Result Reporting	AR
175	4. Other Information Systems (e.g., EMR)	
176	c. Use and Search Functions	C
177	d. Dashboard Generation and Data Mining	F
178	ii. Systems Regulations (e.g., HIPAA)	C
179	iii. Computer Basics (e.g., Hardware, Software)	C
180	iv. System Operations	
181	(i.e., Selection, Verification/Validation, Implementation)	AR
182	v. Qualities of Information Systems	
183	1. Interoperability (i.e., Standards and Interfaces)	F
184	2. Security, Integrity, Privacy, and Confidentiality	F
185	c. Digital Imaging	
186	i. Digital Pathology / Whole Slide Imaging	C
187	1. Basic Use and Z Stacking	C
188	2. Legality of Restrictions	C
189	3. AI, Algorithms, and Data Structure	F
190	4. Compression and Decompression Data Integrity	F
191	5. Database and Image File Types	F
192	d. Project Management	
193	i. Tools, Critical Path, Interaction of Sub-Projects	AR
194	e. Document Control, including Job Aids	AR
195	(i.e., Control of Laboratory Policies, Procedures, and Directives)	
196	f. Inferences from Information	
197	i. Statistical Testing	
198	6. Sensitivity	C
199	7. Specificity	C
200	8. Positive Predictive Value	C
201	9. Negative Predictive Value	C
202	10. P values	C

203		11. Standard Deviation	C
204	ii.	Decision Models	
205		12. Computer Algorithms	C
206		13. Disease-Specific Testing Algorithms	C
207		14. Clinical Decision Support Tools	C
208	iii.	Big Data	C