INDEX

Page numbers in *italics* indicate figures.

Academy of Pharmaceutical Management, 657 Accepted Dental Remedies, 394 Accounting. See Budget Accreditation Manual for Hospitals, 24 Accreditation of residencies in hospitals, ASHP statement of, 584-588 Accreditation standards for pharmacy residency in a hospital, ASHP, 568-583 Adverse drug reaction program role of Pharmacy and Therapeutics Committee, 110-111 Alcohol, tax-free. See Tax-Free Alcohol Regulation Ambulatory care pharmaceutical services, ASHP guidelines: minimum standards for, 303-304 American Association of Colleges of Pharmacy, 62, 71 statement on the abilities required of hospital pharmacists, 591 American Board of Pathology, 51 American College of Apothecaries, 657 American College of Clinical Pharmacy, 657 American College of Physicians, 23, 37 American College of Surgeons, 6, 23, 37 American Dental Association, 23 American Dietetic Association, 48 American Hospital Association, 2, 3, 23, 37, 45, 55, 93, 138, 186, 301 statement on clinical pharmacy and its relationship to the institution, 593-594 statement on health care for the disadvantaged, 662-663 American Hospital Formulary Service, 138, 144, 551, 556 customized list service, 144-145 American Journal of Hospital Pharmacy, American Medical Association, 23, 37, 186, 301 Council on Drugs, 139 Council on Pharmacy and Chemistry, 91 Law Department, 173 rules for drug evaluation, 91

American Nurses' Association, 113 guidelines for collaboration of pharmacists and nurses in institutional care settings, 659-661 American Pharmaceutical Association, 6, 138, 657 Commission to Study Outpatient Hospital Pharmacy Service, 659 American Society of Consultant Pharmacists, 421, 657 American Society of Hospital Pharmacists, 228, 657 accreditation standard for pharmacy residency in a hospital, 568-583 Commission to Study Outpatient Hospital Pharmacy Service, 659 Committee on Isotopes, 482 Committee on Pharmacy in Hospital Administration Education, 597 competency standard for pharmacy supportive personnel, 76-81 drug products information file (computer file), 143 Economic Status Program, 87-89 formation of, 2 formulary drug listing service, 143-144 guidelines for collaboration of pharmacists and nurses in institutional care settings, 659-661 guidelines for collective bargaining, 88-89 guidelines for competencies required in institutional pharmacy practice, 13-17 guidelines for hospital drug distribution system, 263-264, 382 guidelines for implementing and obtaining reimbursement for clinical pharmaceutical services, 401-403 guidelines for obtaining authorization for pharmacists' notations in the patient medical record, 244-245 guidelines for selecting pharmaceutical manufacturers and distributors, 214-216 guidelines for the use of investigational

drugs in institutions, 164-169

American Society of Hospital Pharmacists (Continued) guidelines: minimum standard for ambulatory-care pharmaceutical services, 303-304 guidelines on pharmacist-conducted patient counseling, 158 guidelines on the pharmacist's role in drug-use review and patient-care audits, 118-121 guidelines relative to the safe use of medications in hospitals, 614-623 The Hospital Pharmacist and Drug Information Services, 556 Joint Committee on Hospital Pharmacy. 71 Manual on the Use of Radioisotopes in Hospitals, 482 minimum standard for pharmacies in institutions, 6-12 statement of goals for institutional pharmacy, 5-6 statement on accreditation of residencies (pharmacy) in hospitals, 584-588 statement on clinical pharmacy and its relationship to the institution, 593-594 statement on continuing education, 666-668 statement on Pharmacy and Therapeutics Committee, 93-97 statement on supportive personnel in hospital pharmacy. 61-63 statement on the abilities required of hospital pharmacists, 591 statement on the formulary system, 125-132 statement on the hospital pharmacist's role in infection control, 655-657 statement on the provision of pharmaceutical services in ambulatory care settings, 302-303 statement on the role of the pharmacist in clinical phamarcokinetic services, 243-244 statement on unit dose drug distribution, 264-265 suggested principles of relationship between smaller hospitals and part-time pharmacist, 628-632 supplemental standard and learning objectives for residency training in ambulatory care pharmacy practice, 305-306 Task Force on Payment for Pharmacy Services, 402 Technical Assistance Bulletin on Hospital Drug Distribution and Control, 195, 227-232, 279-290, 414-421, 426-427, 608-609, 647-648 Technical Assistance Bulletin on Hospital Formularies, 127-131

Technical Assistance Bulletin on Institutional Use of Controlled Substances, 350-352 Technical Assistance Bulletin on Repackaging Oral Solids and Liquids in Single Unit and Unit Dose Packages, 421-423 Technical Assistance Bulletin on Single Unit and Unit Dose Packages of Drugs, 410-414 Technical Assistance Bulletin on the Scientific and Therapeutic Evaluation of Drugs for Hospital Formularies, 105 Ancillary supplies distribution. See also Purchasing control distribution, 320, 321 economic order quantity model, 322 qualifications of pharmacist for, 318 pharmacy responsibility for, 318 purchasing, 318-320 guidelines for selecting vendors, 319-320 Anesthesia service, 52 Annual reports, contents, 603-606 format, 602-603 incidents involving medications and pharmacists, 606

ASHP. See American Society of Hospital Pharmacists Atomic Energy Act of 1954, 483

Atomic Energy Commission. See also Nuclear pharmacies jurisdiction of, 483

Audiovisual communications, 159

Basic List of Books and Journals for Veterans Administration Medical Libraries, 552 Blood bank, 51 Blue Cross-Blue Shield Associations, 186 Blue Cross insurance plan, 384-385 Budget as short-range plan for future operations, 185 breakdown of expenses, 185-186 effect of TEFRA and DRG, 186 equipment and construction, 190-191 depreciable equipment check list, 191 expense accounts, 188-190 general information, 188-189 salaries and wages, 189 supplies and material, 189-190 for manufacturing of pharmaceuticals, 427-430 institutional-philosophical considerations, 185 political considerations, 184 public input, 185 purpose of, 184

revenue account, 186-188 income sources, 187-188 sample worksheets, 191-192 sections of, 186-192 support from other departments, 185 Bureau of Alcohol, Tobacco and Firearms, 228

Canadian Council on Hospital Accreditation, 37 Canadian Medical Association, 23, 37 Case mix. See Diagnostic related groupings Catholic Hospital Association, 138 Center for Health Studies, Yale University, 122 Central service department. See Central sterile supply room Central sterile supply room, 52 history, 470 laminar flow hoods, 476-478 federal standard, 477 location, 474 management functions, 470-471 management requirements for pharmacists, 472-473 personnel, 473-474 philosophy and objectives, 471 place in the hospital organization, 472 planning the CSSR, 474-476, 475-479 Standardization Committee, 478-480 Certification of pharmacists, 85 Clinical departments of the hospital, 44-45 medical, 44 support services, 46-47 surgical, 44 Clinical pharmacokinetic services, ASHP statement on the role of the pharmacist in, 243-244 Clinical pharmacy and its relationship to the institution, ASHP and AHA statement on, 593-594 Collaboration of pharmacists and nurses in institutional care settings, 659-661 Collective bargaining, ASHP guidelines for. 88-89 Commission on Pharmaceutical Services to Ambulant Patients by Hospitals and Related Facilities, report of, 301-302 Commission to Study Outpatient Hospital Pharmacy Service, 659 Committees, hospital, 3. See also Pharmacy and Therapeutic Committee Communications from the pharmacy, 154-159 audiovisual communications, 159 patient counseling, 158 publications, 154-158

advantages of, 157 contents, 155-156 distribution, 157 format and duplication, 156-157, 157 title selection, 155 role of the Pharmacy and Therapeutics Committee, 154 Competencies required in institutional pharmacy practice, ASHP guidelines on, 13-17 administration and management, 14 educational activities, conduct of and participation in, 16 information on drugs, assimilation and provision of, 14-15 product formulation and packaging. development and conduct of, 15 quality assurance, development and conduct of, 17 research, conduct of and participation in, 15-16 Competency standard for pharmacy supportive personnel in organized health care settings, ASHP, 76-81 Comprehensive Drug Abuse Prevention and Control Act of 1970. See also Dispensing of Controlled Substances application forms, 333 authority to control, 326-327 definitions of terms, 324-326 exemption of agents and employees, 332 expiration of registration, 332-333 inventory requirements, 334 labeling and packaging requirements, 336 model set of hospital controlled substances regulations, 336-343 definitions. 336-337 hospital control procedures, 337-340, 342-343, 338, 339, 340, 341 registration, 337 modification of registration, 333 offenses and penalties, 335-336 prescriptions, 334-335 registration exemption for hospital house staff, 329-330 registration requirements, 328-329 fees, 329 public interest factors, 329 with Bureau of Narcotics and Dangerous Drugs, 328 schedules for controlled substances, 327-328 separate registration for independent activities, 330-331 for separate locations, 331-332 time of application, 332 Computers in pharmacies ASHP Technical Assistance Bulletin on Hospital Drug Distribution and

Control, 647-648

Computers in pharmacies (Continued) criteria for computer systems, 644-645 impact on dispensing time, 648 managing system development, 645-647 administrative analysis, 646 employee training program, 645 financial analysis, 646 mainframe or standalone systems, 646-647 operations analysis, 646 NABP model computer regulations, 648-652 glossary, 649 purpose and scope, 648 regulation, 649-652 terminology, 643-644 Continuing care service, 665 Continuing education. See Education programs, continuing Contractual relations, 53 contract management, 54-55 advantages of contract services, 54-55 departmental management contract, 54 institutional management contracts, 55 Controlled Substances Act of 1970, 224, 228. 324 Controlled substances, dispensing of. See Dispensing of controlled substances Cost containment, 186. See also Reimbursement mechanisms Costs, hospital, 185 Council on Drugs, 139 Council on Pharmacy and Chemistry, 91 C.S.R. or C.S.S.R. See Central sterile supply room Current Practices Committee, 478-480

Dangerous drugs, stop order for, 114 Departmental management contract, 54 Detailmen. See Medical service representatives Diagnostic related groupings, 57-58, 386 and the Pharmacy and Therapeutics Committee, 122-123 effect on budgeting, 186 Dietary formularies, 151-152 Dietetic services, 48 Dispensing during off-hours by nursing supervisors, 378 by physicians, 380-381 emergency boxes and night drug cabinets, 379-380, 380 extending pharmacy service hours, 382-383 pharmacist-on-call, 381 purchased service, 381 Dispensing of controlled substances. See also Comprehensive Drug Abuse

Prevention and Control Act of

1970

ASHP Technical Assistance Bulletin on Institutional Use of Controlled Substances, 350-352 methadone, 351-352 research, laboratory procedures, and instructional uses, 350-351 control of narcotics by nurses, 344-345, 344 charges to patients for narcotics, 345 delivery to nursing station, 344 mailing of controlled substances, 347-349 miscellaneous regulations, 343-344 model set of hospital controlled substances regulations, 336-343 definitions, 336-337 hospital control procedures, 337-340. 342-343, 338, 339, 340, 341 registration, 337 other systems, 349 protocol for reporting drug abuse or diversion, 345-349 special uses, 350 Dispensing to ambulatory patients ASHP guidelines: minimum standard for ambulatory-care pharmaceutical services, 303-304 ASHP statement on the provision of pharmaceutical services in ambulatory care settings, 302-303 ASHP supplemental standard and learning objectives for residency training in ambulatory care pharmacy practice, 305-306 definition of terms, 300 dispensing routine, 312-314, 311, 312, 313 dispensing to emergency patients, 316-317 Internal Revenue Service rulings on. 314-316 location of out-patient dispensing area, 310 prescriptions in research projects, 314, 315 reasons for growth of ambulatory care, 300-301 report of Commission on Pharmaceutical Services to Ambulant Patients by Hospitals and Related Facilities, 301-302 types of prescriptions received, 310, 311 Dispensing to in-patients. See also Drug distribution and administration; Floor stock system; Unit dose dispensing ASHP guidelines for hospital drug distribution system, 263-264, 382 ASHP statement on unit dose drug distribution, 264-265 evolution of dispensing systems, 262-263

10

other concepts, 294-296 electronic data processing, 295 Medication Order Supply and Individual Charge System (MOSAICS), 295-296 pharmacist at nursing station, 294 problems with, 262 relationship with nursing services, 263 self-medication programs, 296-298 DMC. See Departmental management contract DRG. See Diagnostic related groupings Drug Amendments of 1962, 92 Drug catalogues or lists, 137-138 Drug consultation programs, 665-666 Drug distribution and administration. See also Floor stock system; Unit dose dispensing ASHP guidelines for hospital drug distribution system, 263-264, 382 ASHP statement on unit dose drug distribution, 264-265 ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control (Unit Dose Section), 279-290 inspection of nursing drug cabinets, 260-261 labeling floor stock drugs, 250, 251 nurse administration of drugs, 251-260 medication administration-general, 257-260 medication procedure-unit dose system, 254-257 policy and procedure, 251 regulations, 251-254 patient transfer or discharge, 250 prescribing floor stock drugs, 247-250 transmitting drug order information, 247 Drug Efficacy Study Group, 92, 139 Drug Enforcement Agency, 228 Drug experience reporting, 111 Drug evaluation. See also Pharmacy and Therapeutics Committee ASHP Technical Assistance Bulletin on the Scientific and Therapeutic Evaluation of Drugs for Hospital Formularies, 105-108 evaluation process considerations, 106-108 standardization of forms, 106-108 history, 91 preamble, 105-106 recommended reference materials, 108-109 regulation of, 92-93 rules of American Medical Association Drug information center. See also Library

ASHP statement on, 556-557 ASHP supplemental standard and learning objectives for residency

practice, 559-564 description of, 555-556 primary functions, 558-559 performance guidelines, 557 publications of, 556 regional drug information networks, 557-558 criteria for, 558 objectives for, 558 responsibilities of, 556 Drug information specialists, 63-64 Drug labeling controlled substances, 336 floor stock drugs, 250, 251 for prepackaged drugs, 415-419, 417-419 for safe use of medications, 617-618 packaging and labeling control, 441 Drug lists, emergency, 114 Drug product defect reporting program, 111, 113, 113 **Drug Products Information File** (computer file), 143, 552 Drug rehabilitation programs, 665 Drug safety. See Safe use of medications Drug samples, 221-224 cataloging of, 223-224 control of, 222-223 Controlled Substances Act of 1970 on samples, 224 definition, 221 effect on fiscal operations, 224 use in competitive buying, 221-222 use in the hospital, 221 Drug use/utilization review, ASHP guidelines on the pharmacist's role in drug-use review, and patientcare audits, 118-121 for cost control, 388-389 sample review outline, 120-121 Drugs, dangerous

training in drug information

stop order for, 114

Economic Status Program of the American Society of Hospital Pharmacists, 87-89

Education for pharmacy personnel, 64 ASHP accreditation standard for pharmacy residency in a hospital, 568-583

- ASHP statement on accreditation of residencies (pharmacy) in hospitals, 584-588
- ASHP supplemental standard and learning objectives for residency training in ambulatory care pharmacy practice, 305-306
- ASHP supplemental standard and learning objectives for residency training in drug information practice, 559-564
- professional education of pharmacist. 567

Education and training programs by pharmacists AACP and ASHP Joint Committee statement on the abilities required of hospital pharmacists, 591 suggested guide to curriculum development for hospital pharmacy, 591 syllabus for a course in hospital pharmacy, 591 ASHP and AHA statement on clinical pharmacy and its relationship to the institution. 593-594 drug abuse teaching program, 599-600 emergency medical technician training. 600 external programs, 566, 598-599 internal programs, 556 patient teaching program, 591-592 seminars for graduate nurses, house staff, and medical staff, 589-590 training clinical pharmacists, 592 training residents in hospital administration, 596-598 training student nurses, 588-589 training undergraduate students in hospital pharmacy, 590-591 NABP model clinical pharmacy education and training agreement, 594-596 specialized pharmacy residency training, 599 Education programs, continuing, 666 ASHP statement on continuing education, 666-668 authority, 668 implementation. 667-668 objectives, 667 policies, 668 preamble, 667 Elwood, Paul, M., Jr., 663 Emergency drug lists, 114-115 Equipment. See Physical plant and equipment Evaluation of drugs. See Drug evaluation Extended care facilities consulting pharmaceutical service policies, 633-634 dispensing prescriptions for, 633 Medicare conditions of participation for extended care facilities, 637-639 administration of medications, 638 compliance with laws controlling narcotics, 639 conformance with physician's orders, 637-638 labeling and storing medications, 638-639 procedures for administration of pharmaceutical services, 637 responsibilities of community or consulting pharmacists, 632

role of pharmacists, 636 statistics about, 636 Facilities. See Physical plant and equipment Federation of American Hospitals, 186 FDA. See United States Food and Drug Administration FDA Papers, 552 FDLS. See Formulary drug listing service Financial information. See Budget Flexner study of medical education, 64 Floor stock system charge floor stock drugs accounting forms, 270, 271, 272 allowance or credit procedures, 273-275, 272, 273, 274 definition, 266 dispensing of, 270-271 envelope system, 271-272 patient charge plate, 270 selection of, 268-269 sample list, 268-269 combination floor stock and individual drug order, 267 complete floor stock system, 267 individual prescription order system, 266-267 labeling floor stock drugs, 250, 251 non-charge floor stock drugs definition, 266 dispensing and distribution of, 275-278, 275 drug basket method, 276 mobile dispensing unit, 276-277 patient server concept, 277-278 selection of, 269-270 prescribing floor stock drugs, 247-250 physician's order sheet, 248, 248 prescription form, 249 refill record, 249 Food and Drug Administration. See United States Food and Drug Administration Food, Drug and Cosmetic Act, 161, 177. 228, 323, 336 Drug Abuse Control Amendments of 1965, 323 policy on investigational use drugs. 161 Formularies, hospital antisubstitution laws, 136 arguments against its use, 124 ASHP statement on, 125-132 contents, 140-141 prescription writing, 141 criteria for adding or deleting drugs, 138-140 currentness of, 132, 133 definition of, 126 distribution of, 131-132 drug products information file (computer file), 143

format and appearance of, 131, 141-142 loose-leaf vs. bound, 142 formulary vs. drug catalogue or list. 137-138 index for. 145-147 importance under Medicare rules, 124-125 legal basis for, 134-136 alternative consent methods, 135-136 blanket consent, 135 potential benefits of, 124 Formularies, hospital, preparation of, 136-137 publication of, 142-143 size, 142 specialty formularies, 151-152 Technical Assistance Bulletin on Hospital Formularies, 127-131 text, 147-151, 148, 149, 150, 151 use of non-formulary drugs, 132, 134 Formulary drug listing service, 143-144 customized list service, 144-145 Formulary system, ASHP statement on, 125-132 ASHP Technical Assistance Bulletin on Hospital Formularies, 127-131 content and organization, 128-131 currentness of, 132, 133 definition of, 126-127 distribution of. 131-132 format and appearance, 131 preamble, 125-126 use of non-formulary drugs, 132, 134 Gardner, John W., 92 Generic drugs, 102-105 antisubstitution laws, 136 clinical efficacy, 103-104 evaluation of, 104 formulation of, 103-104 in the hospital formulary system, 135-136 legislation for, 102-103 provision of information about by pharmacists, 104-105 Goals for hospital pharmacies, ASHP statement of, 5-6 Good Manufacturing Practice Regulations, 426, 431-451 buildings and facilities, 432-434 control of components and drug product containers and closures. 436-438 equipment, 435-436 holding and distribution, 443 laboratory controls, 443-446 organization and personnel, 431-432 packaging and labeling control, 441 production and process controls, 438-441 records and reports, 446-451

returned and salvaged drug products, 451

Grant Administration Policy. Office of, 163 Guide to Information Sources for the Hospital Pharmacist, 552

Harrison Narcotic Act, 323 Health and Human Services Department. See United States Department of Health and Human Services Health Care Financing Administration, 228 Health Industry Manufacturers Association, 186 Health Insurance Association of America. 186 Health Maintenance Organization Act of 1973. 57 Health maintenance organizations, 57, 663-665 HICDA-2. See Hospital Adaptation of ICDA, 2nd Edition HMO. See Health maintenance organizations Home care services, 665 Hospice programs, 640, 642 Hospital Adaptation of ICDA, 2nd Edition, 58 Hospital administrators, 42-43 Hospital departments, 44-52 Hospital Insurance Program-Medicare requirements for Pharmacy and Therapeutics Committee, 93 Hospital medical staff. See Medical staff. hospital The Hospital Pharmacist and Drug Information Services, 556 Hospital pharmacy. See Pharmacies, hospital Hospital Pharmacy, Joint Committee on, 71 Hospital reimbursement. See Reimbursement mechanisms Hospital Standardization Program, 37 Hospitals, administration of, 42-43 classification of, 35-37 community AHA and ASHP suggested principles of relationship between smaller hospitals and part-time pharmacist, 628-632 conclusion, 632 functions, 630-632 organization, 629-630 preamble, 629 drug safety, 639-640 drug profiles, 639, 640 inspection of nursing station, 640, 641 financial statistics, 2 handling drugs without a pharmacist, 628, 627, 635-636 patient statistics, 2

Hospitals, community (Continued) personnel, 3 relationship with community pharmacist and, 628, 632 relationship with large hospital pharmacies, 634-635 departments of, 44-52 financial resources of, 56-57 medical staff of, 43-44 need for a pharmacist in each hospital. number registered by American Hospital Association, 3 organizational pattern of, 37 as corporations, 40-41 bylaws for, 40 organization charts, 38-39t JCAH standards, 37, 40-42 reorganization due to regulation and competition, 55-56 small. See Hospitals, community teaching, 36-37 definition of, 45 educational programs in, 45 pharmacist's role in, 45-46 Human Use in Research, Committee on, 160-161 Continuing Surveillance Report, 161 ICDA-8. See International Classification of Diseases Adopted, 8th Revision ICD-9-CM. See International Classification of Diseases, Clinical Modification IMC. See Institutional management contracts IND forms (Notice of Claimed Investigational Exemption for a New Drug), 177-178 Infection control, ASHP statement on the hospital pharmacist's role in, 655-657 Institutional management contracts, 55 Insurance, health. See Reimbursement mechanisms International Classification of Diseases Adopted, 8th Revision, 58 International Classification of Diseases, Clinical Modification- 9th Revision, 58 International Pharmaceutical Abstracts. 551 Intravenous additive program, 455-458, 455, 456, 457 preparation of IV additive solutions. 457-458 sample hospital intravenous admixture program, 460-468. Inventory control. See also Purchasing control

central storage vs. pharmacy storage, 206

computerized pricing and inventory control, 393 control of dated or perishable inventory, 208 record of dated pharmaceuticals, 208. 208 definition, 193 marking of merchandise, 207-208 materials management, 211 per bed basis, 193 perpetual inventory, 210-211 automated, 210-211 shelf-stripping and floor-marking, 207 storeroom arrangement, 206-207 taking physical inventory, 209-210 sample form, 209 Investigational Drug Circular, 183, 552 Investigational drugs in institutions, ASHP guidelines for the use of, 164-169 Investigational use drugs ASHP guidelines for the use of, 164-169 basic principles, 164 classification of drugs, 168-169 guidelines for institutions, 164-166 guidelines for pharmacists, 166-168 clinical testing for, 177-181 first steps, 177-179 IND forms, 177-178 qualifications of investigators, 179-181 tests in institutions, 179 thirty-day delay, 179 Committee on Human Use in Research, 160-161 control of, 169-181 authorization for treatment with. 173-174, 175, 176 charge policy for handling and dispensing, 173 clinical testing for, 177-181 data sheets on investigational drugs, 170, 171 identification of, 172-173 new drug report form, 171-172, 172 registration with Pharmacy and Therapeutics Committee, 169-170 role of pharmacist in clinical evaluation of, 174-176 definition, 160 FDA amendments of 1966, 161-162 Office of Grant Administration policy, 163 policy of U.S. Public Health Service, 160 role of the Pharmacy and Therapeutics Committee, 182 Isotope pharmacies. See Nuclear pharmacies Isotopes, Committee on, 482

JCAH.

See Joint Commission on Accreditation of Hospitals Joint Commission on Accreditation of Hospitals, 23, 228, 229 history of, 23, 37 purpose of, 23-24 standards for pharmaceutical services. 23-33, 166 facilities, 25-27 personnel, 24-25 policies and procedures for administration of drugs and biologicals, 31-32 policies and procedures for intrahospital drug distribution. 29-30 quality assurance, 32-33 scope, 27-29 Joint Commission on Prescription Drug Use. 623-624 Joint Committee on Hospital Pharmacy. Laminar flow hoods, 476-478 Legal basis for formulary system, 134-136 alternative consent methods, 135-136 blanket consent, 135 Legislation, drug, 136 Library. See also Drug information center location, 550 physical facilities, 550-551 sample list of publications, 553-555 selection of contents, 551-555 American Hospital Formulary System, 551 Basic List of Books and Journals for Veterans Administration Medical Libraries, 552 Drug Products Information File, 552 FDA Papers, 552 The Guide to Information Sources for the Hospital Pharmacist, 552 International Pharmaceutical Abstracts, 551 Investigational Drug Circular, 552 National Formulary, 551 United States Pharmacopeia, 551 VOICES 12/60, 552 World List of Pharmacy Periodicals, 552 Lilly Hospital Pharmacy Survey, 202

> Manpower. See Personnel, pharmacy Manual on the Use of Radioisotopes in Hospitals, 482 Manufacturers and distributors, pharmaceutical, ASHP guidelines for selecting, 214-216 Manufacturing of bulk and sterile products in-house, ASHP guidelines for pharmacist participation in home parenteral nutrition programs, 458-460 institutional qualifications, 459

1

resource requirements, 459-460 ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control, 426-427 budgetary control, 427-430 equipment and its sources, 428-429 manufacturing capacity, 428 manufacturing requirements, 427 material requirements, 427-428 operating costs, 429-430 staff, 429 control defined, 426 Good Manufacturing Practice Regulations, 426, 431-451 buildings and facilities. 432-434 control of components and drug product containers and closures. 436-438 equipment, 435-436 holding and distribution, 443 laboratory controls, 443-446 organization and personnel, 431-432 packaging and labeling control, 441 production and process controls, 438-441 records and reports, 446-451 returned and salvaged drug products. 451 intravenous additive program, 455-458. 455, 456, 457 preparation of IV additive solutions, 457-458 sample hospital intravenous admixture program, 460-468 maintenance of equipment, 453-454, 454 parenteral hyperalimentation, 454-455 home parenteral nutrition programs, 458-460 quality control, 430-431, 452-453 reasons for, 425 record keeping, 451-453 work sheet, 451-453 Medicaid, 395-396 Medical record, ASHP guidelines for obtaining authorization for pharmacists' notations in, 244-245 Medical records department, parts of the record, 49-50 purpose of medical records, 48-49 Medical service representatives appointments, 216-217 proper utilization of time, 217-218 ASHP guidelines for selecting pharmaceutical manufacturers and distributors, 214-216 drug exhibits, 213, 218-221 charging for, 220-221 request for display forms, 219, 220 rules for conducting, 219 drug samples, 221-224 cataloging of, 223-224 control of, 222-223

Medical service representatives appointments, drug samples (Continued) Controlled Substances Act of 1970 on samples, 224 definition, 221 effect on fiscal operations, 224 use in competitive buying, 221-222 use in the hospital, 221 duties of, 213 product information sheet, 217, 218 rapport with pharmacists, 213-214 Medical social service department, 51-52 Medical staff, hospital, JCAH Principle and Standard, 43-44 Medicare. See also Reimbursement mechanisms amendments of 1982, 385 conditions of participation, 396-401 extended care facilities, 397-398, 637-639 general hospitals, 396-397 home health agencies, 398 hospital pharmacy or drug room, 398-401 psychiatric and tuberculosis hospitals, 397 reimbursement system, 57-58 Public Law 89-97, 24, 393-401 requirement for Pharmacy and Therapeutics Committee, 93 Title XVII (A) compulsory hospital program, 394-395 Title XVIII (B) voluntary insurance program, 395 Title XIX-Medicaid, 395-396 Medication errors. See Safe use of medications Medication Order Supply and Individual Charge System (MOSAICS), 295-296 Minimum standard for pharmacies in institutions, ASHP guidelines, 6-12 MOSAICS, 295-296 tota and blog talls schemes h the most of the office NABP. See National Association of Boards of Pharmacy NAS-NRC. See National Academy of Sciences-National Research Council National Academy of Sciences-National Research Council, 92 Drug Efficacy Study Group, 92, 139 National Association of Boards of Pharmacy model clinical pharmacy education and training agreement, 594-596 model computer regulations, 648-652 model regulations for nuclear pharmacy, 489-492

equipment requirements, 492

general requirements for pharmacies. 489-491 general requirements for pharmacists. 491 library, 491-492 National Association of Retail Druggists, 657 National Formulary, 139, 198, 204, 394, 409, 551 National Hospice Organization, 640 National Institutes of Health Division of Research Grants, 163 National League for Nursing, 47 National Survey of Hospital Pharmacy Services, 197 New Drugs, 394 Notice of Claimed Investigational Exemption for a New Drug (IND form), 177-178 Nuclear pharmacies Atomic Energy Commission jurisdiction of, 483 Committee on Isotopes of the ASHP, 482 licensure, 483-485 application forms, 485 broad medical licenses, 484 institutional license, 484 specific licenses for private physicians, 484-485 Manual on the Use of Radioisotopes in Hospitals, 482 NABP model regulations, 489-492 Protective Procedures for Personnel Caring for Patients Receiving Therapeutic Isotopes, 486 Radioisotope Committee, 485-488 responsibilities of, 485-486 sample instructions prepared by, 486-488, 487 responsibility of individual users, 489 responsibility of permit holders, 488 role of the pharmacist, 492-493 sources of information, 496 training of students, 493-496 certification, 496 qualifications and selection of the applicant, 495 qualifications of nuclear pharmacy service, 494 qualifications of residency directory and preceptors, 494-495 qualifications of training hospital. 493-494 residency training program, 495-496 Nurse administration of drugs, 251-260 medication administration-general, 257-260 medication procedure-unit dose system, 254-257 policy and procedure, 251 regulations, 251-254 for specific drugs, 252-253 for various routes of administration, 253 general regulations, 251-252 purpose, 251

restrictions for nurse administration of drugs, 254 Nursing homes. See Extended care facilities Nursing service, 47-48 administration of drugs, 121-122 basic assumptions of the National League for Nursing, 47 organization of, 47-48

Office of Grant Administration Policy. 163 Osler, Sir William, 91

Package inserts, patient, 132-134 Parenteral hyperalimentation, 454-455 home parenteral nutrition programs. 458-460 Pathology services, 50-51 Patient care audits, ASHP guidelines on the pharmacist's role in drug-use review and, 118-121 Patient counseling, pharmacist conducted, ASHP guidelines on, 158 Patient package inserts, 132-134 Payment of Pharmacy Services, Task Force on, 402 Pennsylvania Hospital, 1 Personnel, pharmacy. See also Education for pharmacy personnel' ASHP competency standard for supportive personnel in organized health care settings, 76-81 ASHP statement on supportive personnel in hospital pharmacy. 61-63 central transport service of hospital, 71 daily in-patient workload per pharmacist, 69 departmental activity chart, 65 drug information specialists, 63-64 education, 64 flow process chart, 68 forms control, 81-82 application for employment, 81-82 paid vacation, 82, 84 performance rating form, 82, 83 hiring, 82, 85-86 competencies required for pharmacists, 85-86 in-patient activity chart, 67 JCAH standards for, 24-25 job descriptions, 64-65 manpower, 61 messenger service of hospital, 71 outpatient activity chart, 66 queuing theory, 70 salaries, 86-87, 88 specialists, 63

record keeping, 81-82 staff size determination, 66-73 lay personnel, 70-73 professional staff, 66-70 rule of thumb for, 68-69 supportive personnel, 61 allowed functions, 72 ASHP competency standard for supportive personnel, 76-81 ASHP statement on supportive personnel in hospital pharmacy. 61-63 prohibited functions, 72 technician-helpers, 71-73 standards for, 71 time and motion studies, 69-70, 86 Pharmaceutical manufacturers and distributors, ASHP guidelines for selecting, 214-216 obligations of supplier, 214-216 distribution policies, 215 marketing policies, 215-216 technical considerations, 214-215 preamble, 214 responsibilities of the purchaser, 216 Pharmacies (hospital), ASHP guidelines: minimum standard for, 6-12 administration, 7-8 assuring rational drug therapy, 11-12 drug distribution and control, 9-10 drug information, 10-11 facilities, 8-9 research, 12 ASHP statement of goals for, 5-6 defined, 1, 2 history, 1 JCAH standards for pharmaceutical services, 23-33 number of registered pharmacies, 2 organization charts, 73-76, responsibilities of divisions of a large pharmacy department, 74-76 sample distributions, 74 role in the hospital structure, 52-53, 60 Pharmacist-conducted patient counseling ASHP guidelines on, 158 in clinical trials of investigational use drugs; 180 Pharmacist in clinical pharmacokinetic services, ASHP statement on the, 243-244 Pharmacists ASHP guidelines on competencies required in institutional pharmacy practice, 13-17 ASHP guidelines on the pharmacist's role in drug use review and patient care audits, 118-121 ASHP guidelines on the role of the pharmacist in clinical pharmacokinetic services, 243-244 ASHP statement on the abilities required of hospital pharmacists.

591

۲

Index

Pharmacists (Continued) ASHP statement on the hospital pharmacist's role in infection control, 655-657 available positions, 4 community or retail pharmacists, 60-61 competencies required, 13-17, 85-86. 591 expanded duties, 4 job description, 64-65 qualifications for clinical trials of drugs, 179-181 responsibilities, 7-8 role of in drug procurement, 197-204 in extended care facilities, 636 in nuclear pharmacies, 492-493 in teaching hospitals, 45-46 in the hospital, 3, 53, 60, 73 salaries for, 4, 86-87, 88 women pharmacists, 86 Pharmacokinetic services, ASHP statement on the role of the pharmacist in clinical, 243-244 Pharmacy and Therapeutics Committee. See also Drug evaluation and diagnostic related groupings, 122-123 ASHP statement on, 93-102 agenda, 97 committee membership, 96-97 committee name, 96 frequency of meetings, 97 functions and scope, 94-95, 97-98 generic vs. brand name drugs, 102-105 organization and operation, 94 policies, 98-102 purposes, 93-94, 95 drug classification for investigational use, 168-169 drug product defect reporting program, 111, 113, 113 drug utilization review, 115-118 patient drug utilization profiles, 116, 117, 250, 282 history of, 92 mandatory committee under Medicare, 1.93nurse administration of drugs, 121-122 preparation of hospital formulary, 136-137 recommended reference materials, 108-109 role in adverse drug reaction program. 110-111 drug experience reporting, 111 report form, 111, 112 role in developing emergency drug lists, 114-115 role in drug safety, 109-110 Pharmacy in Hospital Administration Education, Committee on, 597

Philips Roxane Laboratories, 285 Physical plant and equipment building and facilities for manufacturing, 432-434 cleanup area, 537 conveyor and pneumatic tube systems, 545 counter surfaces, 547, 546 electric lighting and service, 544-545 equipment built-in equipment, 541, 544 electrical safety, 536-537 fixed equipment, 524 movable equipment, 524 suggested equipment lists, 524-536 administration, 532-533 control, 533-534 drug distribution, 525-527 drug information, 534-536 manufacturing and packaging, 528-532 outpatient pharmacy, 527-528 pharmacy substation, 528 teaching, 536 equipment planner's responsibility, 522, 524 finishes for counters, floors, and walls, 547-548, 546 floor space, 517, 522 floor plans, 518-519, 520-521, 523, 540-541, 542-543 floor surfaces, 547-548, 546 functional planning, 498-515 worksheets for, communication and transport, 512-513 environmental requirements, 514 interrelationships, 510-512 location, 513-514 mechanical and other requirements, 508-510 staffing requirements, 507-508 steps for, 499 work areas, 506-507 workloads and workflows, 500-506 injection reconstitution area, 538 labeling and inspection room, 538 location, 515-517 out-patient considerations, 516 satellite pharmacies, 517 minimum standard for pharmacies in hospitals, 498 nonsterile mixing and filling room, 537 plumbing, 545 prepackaging area, 537 quarantine storage, 538 refrigeration facilities, 538-539, 541 constructing a cold room, 539, 541 ventilation, 545 wall surfaces, 548 Policy and procedure manual. See Procedure manual PPI. See Patient package inserts

Prepackaging of drugs, ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control. 414-421 control record, 419 labeling, 415-419, 417-419 expiration date, 417, 419 step-by-step instructions, 418-419 strip packaging, 420-421 ASHP Technical Assistance Bulletin on Repackaging Oral Solids and Liquids in Single Unit and Unit Dose Packages, 421-423 ASHP Technical Assistance Bulletin on Single Unit and Unit Dose Packages of Drugs, 410-414 definitions, 410 general considerations, 411-412 specific considerations, 412-414 policy determination, 406-408 prepackaging mechanisms, 284-285, 284, 286-291 prepackaging operation, 408, 409 quality control guidelines for single packaging or parenterals, 423-424 types of containers, 408-410 Prescription Drugs, Task Force on, 60 charge of, 92 Prescription writing guidelines, 141 Pricing of drugs, 389-390 break-even point pricing, 392-393 computerized pricing and inventory control, 393 per diem drug charge, 390 Procedure manual ASHP guidelines for obtaining authorization for pharmacists' notations in the patient medical record, 244-245 ASHP statement on the role of the pharmacist in clinical phamarcokinetic services, 243-244 contents and format, 232-235 sample outlines, 233-235 definition, 232 for in-service training and education. 227 functions in institutional pharmacy practice, 242-243 reasons for having, 226 regulatory agencies affecting, 228 review policy, 230 sample bulletins, 235-241 automatic stop order for dangerous drugs, 236 hospital prescriptions, 235-236 intravenous solutions, addition of drugs by nurses, 237-238 medications, preparation and administration by nurses, 238-241 pharmacy hours, 237 requisition for pharmacy supplies. 235

.

separation of internal and external use preparations, 236 sample policies, 229-231 scope, 232 sources of pharmaceutical standards and guidelines, 228 special manuals, 241-242 special section on clinical pharmacy. 242 statement from ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control. 227-232 Professional and public relations administration committee work, 655 ASHP and ANA guidelines for collaboration of pharmacists and nurses in institutional care settings, 659-661 ASHP statement on the hospital pharmacist's role in infection control, 655-657 continuing care service, 665 continuing education programs, 666 ASHP statement on continuing education, 666-668 cooperation of medical research staff. 658 cooperation with local pharmacists. 658-659 cooperation with nursing staff, 659-661 displays, 662 drug consultation programs, 665-666 drug rehabilitation programs, 665 health maintenance organizations, 663-665 home care service, 665 maintain efficient pharmacy, 661 membership in professional associations, 657-658 opportunities for public relations program, 654-655 participation in comprehensive health care programs, 662-663 speaking engagements, 661 Protective Procedures for Personnel Caring for Patients Receiving Therapeutic Isotopes, 486 Public Health Service. See United States Public Health Service Public Law 89-97. See Medicare Public Law 91-513 (Comprehensive Drug Abuse Prevention and Control Act of 1970), 323-326 Public Law 92-603 (Social Security Act). 24 Public relations. See Professional and public relations Publications of the pharmacy, 154-158 advantages of, 157

contents, 155-156

distribution, 157

Index

Publications of the pharmacy (Continued) format and duplication, 156-157, 157 title selection, 155 Purchasing control. See also Ancillary supplies distribution; Inventory control ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control, 195 bidding, 198 controls on purchases, 201-204 computation of inventory turnover, 201-202 cost of carrying inventory, 203-204 cost of ordering, 203 economic order quantity, 202-204 reorder quantity level, 202-203 vendor lead time, 202-203 definition, 193 discounts, 205-206 drug selection, purchasing authority, responsibility and control, 195-197 quality of drugs, 204-205 qualified suppliers list, 205 suppliers application form, 205 purchasing agent vs. pharmacist, 194-197 standards for pharmacists, 194-195 purchasing procedure, 198-201 out-of-stock form, 201 purchase order, 199-200, 200 purchase record, 201, 201 purchase request form, 199, 199 receiving, 200, 206 role of pharmacist in drug available procurement, 197-204 role of purchasing agent in drug procurement, 197 Quality control, 430-431, 452-453 Radioisotope Committee, 485-488 responsibilities of, 485-486 sample instructions prepared by, 486-488 Radiopharmaceuticals. See Nuclear pharmacies Radiology services, 51 Reimbursement mechanisms. See also Medicare ASHP guidelines for implementing and obtaining reimbursement for Clinical pharmaceutical services, 401-403 Blue Cross plan, 384-385 break-even point pricing, 392-393 charge cards, 403-404 commercial insurance plans, 385 computerized pricing and inventory control, 393 drug utilization review, 388-389

Medicare cest-per-case management concept, 385-386 prospective pricing concept, 386-388 per diem drug charge, 390 pricing of drugs, 389-390 professional fee concept, 390-392 third party coverage, 56-57 Remington's Practice of Pharmacy, 429 Research in hospital pharmacy criteria for research report, 20-21 facilities for research, 22 nature of, 17-18 scientific approach, 19-20 scope of, 19, 22-23 special types, 18-19 staff for, 22 structure of research report, 21 Residency (pharmacy) in a hospital, ASHP accreditation standard for, 568-583 application of the standard, 569 certification, 583 definitions, 568 objectives, 568-569 qualifications and selection of the applicant, 576-577 qualifications of the pharmacy service, 570-575 qualifications of the residency director, 575-576 qualifications of the training hospital, 569-570 residency training program, 577-583 ASHP statement on accreditation of, 584-588 accreditation procedures, 586-588 authority, 584 definition, 584 objectives, 584 policies, 585-586 preamble, 584 Residency training in ambulatory care pharmacy practice, ASHP supplemental standard and learning objectives for, 305-306 definitions, 305 extramural experiences, 309 learning objectives and areas of emphasis, 306-309 qualifications of applicant, 306 qualifications of pharmacy servic 305-306 qualifications of preceptor, 306 qualifications of training site, 305 research projects, 309 Residency training in drug informatio. practice, ASHP supplemental standard and learning objectives for, 559-664 availability of service, 560 definitions, 559 extramural experiences, 563-564

1

684

learning objectives and areas of emphasis, 561-563+ location, 561 physical facilities, 560 qualifications of the pharmacy service, 560 qualifications of the preceptor, 561 qualifications of training site, 559-560 research projects, 564 resources, 560 scope of service, 560-561 staffing, 560 & oberts, Jonathan, 1 Sa fe use of medications ASHP guidelines relative to the safe use of medications in hospitals. 614-623 administration of medications, 621-622 care of drugs and drug cabinets in nursing units, 618-619 Labeling and dispensing in-patient prescriptions, 617 Pabeling and dispensing out-patient prescriptions, 618 l abeling and medication containers, 615-617 n'iedication cards, 620 medication errors, 622-623 m edication orders, 619 preamble, 615 preparation of medications, 621 recording of medications, 622 drug interaction surveillance, 623 in community hospitals, 639-640 Joint Commission on Prescription Drug Use, 623-624 medication errors ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control, 608-609 corrective measures, 610-614 definition, 607-608 factors contributing to, 609-610 inadequate drug stations, 611-612, 613 inadequate labeling inadequate policies for reporting incidents, 613-614 lack of pharmacist, 610 non-professional personnel, 610 role of Pharmacy and Therapeutics Committee, 109-110 shared services, 53-54 Social Security Act (Public Law 92-603). Social Security Amendment of 1983, Title VI, 57, 386 Social services. See Medical social service department society of Veterinary Hospital Pharmacists, 657

- State boards of pharmacy, 228
- State Board of Registration in Pharmacy. 82
- responsibilities, 85
- Sterile Supply Room. See Central sterile supply room
- Stop order for dangerous drugs, 114
- Storage of drugs. See Inventory control
- Supplies. See Central service department ancillary. See Ancillary supplies distribution
- Support services, hospital, 46-47
- Supportive personnel in hospital
- pharmacy, ASHP statement on. 61-63
- observations, 62
- recommendations, 62-63
- Supportive personnel in organized health care settings, ASHP competency standard for, 76-81
 - aseptic compounding and parenteral admixtures, 80
 - chemical and physical properties of drugs, 78
 - drug dosages and administration. 79 drug purchasing and inventory control. 79
 - duties and responsibilities, 78
 - health care institution and pharmacy department, 77
 - manufacturing, packaging and labeling of drugs, 79-80
 - medical terminology, 78
 - record keeping functions, 81
 - unit dose drug distribution system. 80-81
 - weight and volume equivalents, 78-79

Tax Equity and Fiscal Responsibility Act, 58-59, 124, 386

effect on budgeting, 186

- Tax-free alcohol regulation, alcohol records and automatic data processing, 376
 - application for permit, form 5150.22, 358-360, 374
 - bonds and consents of surety, 364
 - changes after original qualification. 361-364
 - continuing withdrawal permits, 373, 375
 - definitions, 354-356
 - destruction of marks and brands, 357
 - dispensing alcoholic liquors to patient, 375-376
 - document requirements, 357-358
 - forms and procedures, 356-357

industrial alcohol user permit, 360-361 liability for tax, 357

losses, 371, 375

LIBRARY NOPTHERN UNIVE

preinises and equipment, registry of stills, 364 withdrawal and receipt of tax-free alcohol, 369-371 Technical Assistance Bulletin on Hospital Drug Distribution and Control, 195, 227-232, 279-290, 414-421, 426-427, 608-609, 647-648 Technical Assistance Bulletin on Hospital Formularies, 127-131 formulary contents and organization, 128-131 Technical Assistance Bulletin on the Scientific and Therapeutic Evaluation of Drugs for Hospital Formularies, 105 evaluation process considerations, 106-108 standardization of forms, 106-108 preamble, 105-106 TEFRA. See Tax Equity and Fiscal Responsibility Act

Therapeutic equivalency. See Generic drugs

Third party coverage, 56-57

Whit Haber has for "

Unit dose dispensing, ASHP statement on unit dose drug distribution, 264-265 ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control (Unit Dose Section), 279-290 definition, 278 doses not administered, 294 general, 278-279

general, 276275 other considerations, 283-285, 288, 290 initiation of unit dose system, 283 pre-system phase, 290 personnel time, 283-284 prepackaging mechanisms, 284-285, 284, 286, 287, 288, 289, 290, 291 purchase of drugs in unit dose packages, 285, 288, 290, 285 purchased packaging service, 285 Brewer System, 288 Philips Roxane Laboratories, 285 Wyeth Laboratories, 285, 288 patient's medication profile, 282, 283 physician's drug order, medication order sheets, 280-281

al de trachar - romanica al de trachar - romanica al de trachar - company

sar duinin 280 ner procedure, 291, 293-294 centralized unit dose drug distribution system (CUDD), 283, 291 decentralized unit. dose drug distribution system (DUDD), 283, 291, 293-294, 291, 293 United States Department of Health an-d Human Services Office of Grant Administration Policy, 163 United States Department of Justice, 2228 United States Department of the Treasury, 228 United States Food and Drug Administration, 228 drug experience report form, 111 drug product defect reporting for n, 111-113, 113 drug release form, 160 Good Manufacturing Practices Regulations, 426, 431-451 patient package inserts, 132-134 United States Homeopathic Pharmacopeia, 394 United States Pharmacopeia, 139, 198, 204, 394, 409, 551 United States Pharmacopeial Convention, 228 United States Public Health Service policy on rights, privacy, and welfare of humans involved in drug research, 160

Utilization review, 115-118. See also Drug use/utilization review patient drug utilization profiles, 16, 117, 282

VE program, 186 *VOICES 12/60*, 552 Voluntary Effort to Contain Heal in Care Costs, 186

Women pharmacists, 86 World List of Pharmacy Periodicals, 552 Wyeth Laboratories, 285, 288

Yale University Center for Health Studies, 122