

---

## INDEX

---

### A

Aberdeen Group, 53  
 Accounting skills, 201  
 Activity-based costing, 68  
 Administrative costs, 46–48  
 Alliances: hospital-GPO,  
   109–111, 287n29; local,  
   to improve power with  
   distributors, 142  
 American College of Healthcare  
 Executives, 26  
 American Hospital Association  
 (AHA), specialty hospitals  
 criticized by, 159, 160, 161  
 American Surgical Hospital  
 Association (ASHA), 160, 161  
 Anti-kickback statute, 123,  
 272–274  
 Arizona State University, Center  
 for Advanced Purchasing  
 Studies, 103, 214  
 Association for Healthcare  
 Resource and Material  
 Management, 211  
 ASU/CHMR study: methodology  
 for, 20–24; purpose of, 39;

research questions for, 4;  
 sponsors of, 3

Aurora Health Care, 4  
 Authority, outside, health  
 care supply chains and,  
 8–10

### B

B&D, 95  
 Beaulieu, M., 102, 113  
 Benchmarking: in Cardiothoracic  
 Center (U.K.) case study,  
 243–244, 251; data for, 202,  
 206; by GPOs, 51, 104, 114;  
 levels of development and, 183,  
 190, 194; by progressive sys-  
 tems, 50–51; in Value of  
 Group Purchasing Case  
 Studies, 221–223  
 Best Alternative to a Negotiated  
 Agreement (BATNA), 65  
 Betz, R., 216  
 BJC HealthCare (St. Louis), 52,  
 87, 158  
 Broadlane, 54, 282n22  
 “Bullwhip effect,” 127, 137

Burns, L. R., 32, 125, 129, 137,  
 177, 208  
 Byrnes, J., 29

### C

Cardinal Health, 127, 131,  
 133, 182  
 Cardiothoracic Center (U.K.),  
 229–255; benefits of strategic  
 purchasing process at, 75,  
 243–250; budget of, 231; future  
 purchasing processes at,  
 252–255; goal of purchasing  
 initiative at, 231–232; history  
 of, 230; lessons from collabora-  
 tive purchasing approach at,  
 250–251; market analysis and  
 segmentation by, 234–238;  
 purchasing process at,  
 238–243; purchasing strategy  
 of, 232–234  
 Carr, A. S., 221  
 Casey, J., 160  
 Category analysis, 52–55, 68,  
 282n17  
 Catholic Health Initiatives, 4

- Center for Health Management Research (CHMR). *See* ASU/CHMR study
- Centralization: advantages and disadvantages of, 156, 164, 165; as barrier to managing customer relationships and preferences, 84–85; implementation risk and, 51, 52; of inventory and distribution system, 146; as organizational design consideration, 171, 172, 174; varying forms of, 158
- Certificate of Need (CON) laws, 161, 162
- Chandler, A., 155
- Chief executive officers (CEOs), 113, 204–205, 224
- Chief financial officers (CFOs), 198, 204
- Chief information officers (CIOs), 198
- Chief operations officers (COOs), 204
- Chief supply officers. *See* Health care supply chain managers
- Chopra, S., 5, 146
- Christianson, J. B., 98
- Clark, J. A., 120
- Classification of goods and services, 144
- Clients, external and internal, of health sector supply chain, 6
- Clinical resource specialists, 197
- Clinicians: as customers, 30, 74, 75–82; involvement of, in supply chain management, 74–75, 283n6; standardization and, 73, 94–95; suppliers and, 91–93, 285n49; supply chain managers' work with, 205. *See also* Nurses; Physicians; Surgeons
- Clockspeeds: amplification of, 127; defined, 7; in health care industry, 7–8, 43; organizational design in health care industry and, 166–168
- Codes of conduct, for GPOs, 120–121
- Collaboration: with distributors, 142; supplier relationship strategies focusing on, 60–62
- Collaboration and integration: defined, 190; levels of development and, 190–191
- Commodities: defined, 282n22; equivalencies in, 94, 284n31; secured through GPOs, 285n55
- Communication and coordination skills, in hybrid organizations, 170
- Competence, in relationship with GPO, 112. *See also* Core competencies
- Competitive advantage: achieved with strategies, 32, 162–163; GPOs and, 111–112, 114–115, 288n45; by using technology, 206
- Complexity, as dimension of environment, 157–158
- Complexity strategy, 59
- Conrad, D. A., 98
- Consorta, 116–117
- Contingency management: inventory and distribution management and, 133–134; necessity of, in progressive systems, 40, 106–107; organizational design and, 156; strategic fit and, 192; theoretical basis of, 38
- Contracting strategy, as supply chain functional prerequisite, 181
- Control, over inventory and distribution, 139–140
- Core competencies: defined, 288n42; outsourcing and, 106–107, 112
- Cosmopolitan physicians, 77–78
- Cost analysis, 63–64, 186–188
- Cost savings: determined at category analysis stage of strategic sourcing, 68; with GPO participation, 102–103, 118–120, 214–215, 216, 217–219, 296n8; with improved inventory and distribution processes, 1–2, 125, 126; with information technology, 208–209; potential, with health care supply chain management, 25; with standardization programs, 147; strategic sourcing for, 68–69; with value analysis, 74–75, 82
- Costs: administrative, 46–48; annual, of health care supplies for hospitals, 277n3; inventory carry, 137; shipping, 137–138; total, of ownership, 46–48, 64, 186, 188, 194–195; types of, 45–46; of variations in inventory and distribution process, 132–133
- Court, B. H., 58
- Crawford, F., 152
- Critical goods strategy, 59
- Crossing the Quality Chasm* (Institute of Medicine), 98
- Cultures. *See* Organizational cultures
- Customer preference management (CPM): barriers to, 83–88; outcomes associated with, 70
- Customer relationship management (CRM): barriers to, 83–88; internal clients as part of, 6; as macro process in hospital supply chain, 5; outcomes associated with, 70
- Customers: clinicians as, 30, 74, 75–82; marketing directly to, 93, 280n16; patients as, 29, 75–76; satisfaction of, and information given by HMOs, 209

## D

- Decentralization: advantages and disadvantages of, 164, 165; of materials management, 258
- DeGraaff, R. A., 125, 129, 137
- Dell Computers, 125
- Demand risk, 49, 51, 182
- Deming Wheel, 202
- Design. *See* Organizational design
- Detached physicians, 79–80
- DeWine, M., 286n2
- Direct-to-customer (DTC) advertising, 93, 280n16
- Disintermediation, 129
- Distribution, defined, 126. *See also* Inventory and distribution
- Distributors: disintermediation of, 129; increased role of, 152–153;

levels of function of, 129–132;  
 organizations of, vs. GPOs, 153;  
 partnerships with, 142–143; role  
 of, 127–128; strategic value of,  
 139; strategies for small  
 hospitals to use with, 142  
 Dranove, D., 180  
 Drucker, P., 156, 173

**E**

E-commerce: in hospitals in future,  
 188, 225–226; in National  
 Health Service (U.K.), 246, 248,  
 250; value of, in health care  
 supply chain, 147, 208  
 E-procurement systems, 207–208  
 Economic order quantity (EOQ)  
 models, 136  
 Electronic data interchange (EDI),  
 147, 148–149  
 Ellram, L. M., 186, 227  
 Employees. *See* Clinicians; Personnel  
 Enterprise resource planning  
 systems (ERPs), 188, 201, 207  
 Environment. *See* Organizational  
 environment  
 Expenses: hospital operating, 2;  
 reduction of, for total joint  
 arthroplasty (TJA), 71–72.  
*See also* Costs

**F**

Fact-based negotiation, 64–65  
 Federal Trade Commission, 101,  
 117, 162  
 Federation of American  
 Hospitals, 161  
 Fierens, L., 116  
 Financial skills, 201  
 Fine, C. H., 7, 43, 127, 166–167  
 Firestone, G., 216  
 Five Force model of market  
 analysis, 56–57  
 Food and Drug Administration (FDA):  
 drug-eluting stent regulation by,  
 9, 17–18; regulation of new and  
 reprocessed products by, 8  
 Frames, for viewing health care  
 supply chains, 35–37  
 Frazelle, E., 135

**G**

Gain sharing, 74, 179, 263–276  
 Global Health Exchange (GHX),  
 54, 188, 208, 248–250  
 Goals: affecting supply function,  
 172; in hybrid organizations,  
 169–170  
 Goodwill, in relationship with  
 GPO, 112  
 Gorman, L., 161  
 Government Accountability Office  
 (GAO): on price savings with  
 GPOs, 118, 119; on specialty  
 hospitals, 159, 160  
 Group purchasing organizations  
 (GPOs), 100–124, 213–227;  
 alliances between hospitals  
 and, 109–111, 287n29;  
 benefits of participation in,  
 101–103; codes of conduct for,  
 120–121; contract compliance  
 by members of, 213, 216, 217,  
 221, 226–227; cost savings  
 achieved with, 102–103,  
 118–120, 214–215, 216,  
 217–219, 296n8; defined,  
 291n1; future of, 117–120,  
 215; history of, 103–105; in  
 hybrid organizational design  
 case study, 258, 261, 262; in-  
 creasing participation in, 15,  
 278n19, 285n55; legislation  
 affecting, 104, 123–124,  
 286n2; managing with, as  
 supply chain functional prereq-  
 uisite, 182; progressive systems'  
 relationship with, 106–107,  
 113–115; risk reduction with,  
 66–67, 107–109; strategic  
 thinking about participation in,  
 116–117; trust in relationship  
 with, 111–112, 113, 118, 139;  
 VA acting as, 287n12; value  
 analysis and, 83, 99, 102.  
*See also* Value of Group  
 Purchasing Case Studies

**H**

Handfield, R., 58, 111  
 Harland, C., 107, 199

Harris, J., 160  
 Haywood, G., 230  
 HCA, 81–82, 109, 147, 158, 197  
 Health care executives: inventory  
 and distribution process and,  
 149–150; managerial fads  
 adopted by, 27–28; supply  
 chain management as viewed  
 by, 33–34  
 Health care supplies, hospitals'  
 annual spending for, 25, 277n3,  
 279n3  
 Health care supply chain manage-  
 ment: collaboration and inte-  
 gration and, 190–191; cost  
 analysis and, 186–188; current  
 state of, 26–28; frame analysis  
 used in, 35–38; functional prob-  
 lems and prerequisites in,  
 181–182; information technol-  
 ogy and, 188–190; levels of  
 development of, 176–177,  
 182–186; potential benefits of,  
 1–2, 25; strategic fit in,  
 179–182; unique characteristics  
 of, 5–11, 278n8. *See also* Supply  
 chain management  
 Health care supply chain managers,  
 196–205; expanding role of,  
 197–199; goals of, 196; improv-  
 ing professional capabilities of,  
 211–212; network management  
 by, 199–205; supply chain man-  
 agement as viewed by, 33–34;  
 tasks performed by, 196–197  
 Health care supply chains: defined,  
 30; disintermediation of, 129;  
 frames for viewing, 35–37;  
 unique aspects of, 5–11. *See also*  
 Supply chains  
 Health Industry Group Purchasing  
 Association (HIGPA), 95, 103,  
 119–120, 121, 122, 213–214,  
 226, 286n2  
 Health Industry Manufacturers  
 Association (HIMA), 126  
 Health Sector Supply Chain  
 Research Consortium, 212  
 Health sector supply chains.  
*See* Health care supply chains  
 Health Trust Purchasing  
 Group, 109

Herzlinger, R., 158  
 Hip implants, reduction of expenses for, 71–72  
 Horizontal integration, levels of development and, 180, 181, 183, 184  
 Hospital for Joint Diseases, 71–72  
 Hospitalists, 76  
 Hospitals/hospital systems:  
   alliances between GPOs and, 109–111, 287n29; annual spending by, for health care supplies, 25, 277n3, 279n3; decided against standardization, 75; direct negotiation with suppliers by, 101, 214; model of GPO involvement of, 106–107; model of strategic fit for, 178–179; prevalence of GPO contracting by, 103; specialty, 158, 159–162. *See also* Levels of development; Progressive systems  
 Hurwich, M. R., 224  
 Hybrid organizational design, 168–171; case study of, 257–262, 297n1; characteristics of, 169–170; as most effective, 164, 168, 173, 262, 291n17; teams in, 170–171

## I

Implementation risk, 49, 51, 63, 182  
 Independent physicians, 80  
 Indiana Heart Hospital, 208  
 Information technology (IT):  
   concerns about implementing, 209–210; cost savings with, 208–209; e-procurement systems as, 207–208; enterprise resource planning systems (ERPs) as, 188, 201, 207; in inventory and distribution process, 133, 147–149; levels of development and, 188–190; skills in, required for network management, 201; to support shift from transactional to strategic perspective, 205–207

Institute for Supply Management, 211  
 Institute of Medicine: *Crossing the Quality Chasm*, 98; *To Err Is Human*, 42; on use of technology, 210  
 Integrated delivery networks (IDNs):  
   compliance with, 223–224; as threat to GPOs, 215  
 Integration: horizontal, 180, 181, 183, 184; levels of development and, 177, 180–181; vertical, 126, 180–181, 183–184. *See also* Collaboration and integration  
 Internal supply management (ISM), 5  
 Inventory: defined, 126; stock-outs of, 12, 145–146; strategic value of, 139, 149; turnover of, 144–145; waste of, 145  
 Inventory and distribution, 125–154; availability-cost trade-offs in improving, 135–138; centralized, 146; contingency approach to, 133–134; control over, 139–140; cost savings with improved, 1–2, 125, 126; managerial understanding of, 149–150; outsourcing of, 41, 139–140, 149; personnel for, 149; strategic questions for analyzing, 138–143; strategic view of, 151–154; as supply chain functional prerequisite, 182; tactical questions for analyzing, 143–149; technology used in, 133, 147–149; tracking costs of variations in, 132–133. *See also* Distributors  
 Inventory carry cost, 137  
 Iorio, R., 71

## J

John Muir/Mt. Diablo Health System (California), 3  
 Johnsen, T., 199  
 Johnson, P. F., 291n17  
 Johnson and Johnson, 125, 138  
 Just-in-time (JIT) inventory system, 134

## K

Kaiser Permanente, 58, 87  
 Kaluzny, A., 180  
 Katz, R., 83  
 Kearney, A. T., 224  
 Knee implants, reduction of expenses for, 71–72  
 Knight, L., 107, 199  
 Kohl, H., 286n2

## L

Lahey Hitchcock Medical Center, 71  
 Lanigan, E. P., 224  
 Leader physicians, 80–81  
 Leadership. *See* Health care supply chain managers  
 Leenders, M., 291n17  
 LeeSar Health Trust Partners, 129  
 Legacy systems, 206–207  
 Levels of development, 175–195;  
   characteristics of, 182–186;  
   collaboration and integration and, 190–191; cost and value analysis and, 186–188; different strategies associated with, 175–176; information technology and, 188–190; integration and, 177, 180–181; overview of, 12–13, 176–177; strategic fit and, 177–178, 192–194; value of understanding, 194  
 Leverage goods strategy, 59  
 Lewin Group, 161  
 Local physicians, 77–78  
 Luke, R.D., 32

## M

Maltz, A., 227  
 Managers. *See* Health care executives; Health care supply chain managers  
 Manship, J., 35  
 Market analysis, 55–58; Five Force model of, 56–57  
 Market risk, 49, 50–51, 182  
 Marshall, A., 230, 242  
 Mascie-Taylor, H., 79, 80, 81

## Index

303

- Materials management: benefits of standardization for, 73; functions included in, 30; GPOs and, 122; limited role and scope of, 5, 11; in Metropolitan Hospital System, 258, 259; in Value of Group Purchasing Case Studies, 223
- Mathews, R., 152
- Mayo Clinic, 4, 40, 133–134, 136, 158, 203
- McClellan, M., 17
- MedCath, 160, 161
- Medical Device Competition Act (2004), 286n2
- Medicare, 10, 119
- Medicare Prescription Drug, Improvement, and Modernization Act (2003), 159
- Meier, C., 160
- Meindl, P., 5, 146
- Mendes, E., 120
- Metrics: for implementing standardization, 95, 96, 97; skills in, required for network management, 202
- Metropolitan Hospital System, 257–262, 297n1
- Minor, 127, 182
- Motwani, J., 230
- N**
- National Center for Health Leadership, 26
- National Contracts Inc., 216
- National Health Service (U.K.), 42. *See also* Cardiothoracic Centre (U.K.)
- NCI, 181
- Negotiation: direct, with suppliers, 101, 214; fact-based, 64–65
- Neoforma, 54, 188, 208
- Network management: integrated system required for, 200–201; of internal, external, and executive networks, 202–205; leadership for, 201; management skills for, 201–202; roles required for, 199–200
- Nichols, E., 58, 111
- Nollet, J., 102, 113
- Novation, 41, 103; Value of Group Purchasing Case Studies by, 213, 215–223, 226
- Nurses, role of, in progressive systems, 81–82, 97. *See also* Clinicians
- O**
- Office of the Inspector General: drug-eluting stents and, 10; on gain sharing, 74, 263–276
- Ohio Health, 196
- Ohio State University Medical Center, 4
- Open systems approach, of hybrid organizations, 169
- Operating expenses, hospital, 2
- Orchestration frame, 36
- Organizational cultures: as barrier to standardization, 86–88; levels of development in progressive systems and, 192–194; strategic fit between supply strategy and, 155
- Organizational design: clockspeeds and, 166–168; organizational structure vs., 163–164; strategic questions for, 171–173; trade-offs with dimensions of, 164, 166; vertical vs. horizontal integration in, 180–181. *See also* Hybrid organizational design
- Organizational environment: complexity of, 157–158; components of, influencing organization, 156–157; defined, 156; factors in, affecting supply chain organizational design, 171–172; stability of, 158–159
- Organizational strategies: categorizing, 162–163; defined, 162
- Organizational structure: elements of, revealed by mapping, 172; organizational design vs., 163–164
- Outcomes, improved, as benefit of health care supply chain management, 2
- Outsourcing: considerations in decisions on, 105–106; core competencies and, 106–107, 112; with GPOs, 103; of inventory and distribution, 41, 139–140, 149; reducing risk with, through GPOs, 107–109. *See also* Group purchasing organizations (GPOs)
- Owens, 127, 182
- P**
- Partnerships, with distributors, 142–143
- Patients: as customers, 29, 75–76; marketing directly to, 93, 280n16; standardization's benefits for, 73; suppliers and, 93–94
- Pauley, M., 76, 177
- Pedler, M., 79, 80, 81
- Peninsula Trust at Plymouth Hospitals (U.K.). *See* Cardiothoracic Center (U.K.)
- Personnel: clinical, supply process role of, 173; inventory and distribution, 149
- Pharmacy departments, GPO contract compliance by, 216, 221, 226, 227
- Physicians: centrality of, in health care supply chain, 6–7; cosmopolitan vs. local, 77–78; gain sharing with, 74, 179, 263–276; getting participation of, 98–99; hospital role of, 76; involvement of, in purchasing in progressive systems, 78–79, 91, 96–97, 285n49.; product selection role of, 76–77, 94, 285n49; referrals to specialty hospitals by, 159; reluctance to engage, in standardization, 86; types of, in progressive systems, 78–81. *See also* Clinicians; Surgeons
- Plan-Do-Check-Act (PDCA Cycle), 202
- Plummer, P. M., 32
- Porter, M., 56, 162–163
- Premier, 103
- Price analysis, 63–64
- Prices, as purchase costs, 45
- Process improvement, skills in, 202

- Product selection: physicians' role in, 76–77, 94, 285n49; as supply chain functional prerequisite, 181
- Products, outside regulation of new and reprocessed, 8–10, 278n12. *See also* Stents
- Progressive systems: characteristics of standardization process in, 87; contingency approach of, to inventory and distribution, 133–134; defined, 12; GPO relationship of, 106–107, 113–115; levels of development in, and strategic fit, 192–194; nurses' role in, 81–82, 97; physician involvement in purchasing in, 78–79, 91, 96–97, 285n49; strategic management of supplier relationships by, 89–90; types of physicians in, 79–81
- Purchase costs, 45
- Purchasing: advantages in, offered by GPOs, 102–103; hospital executives' vs. supply chain managers' view of, 33–34; physician involvement in, in progressive systems, 78–79, 91
- Purchasing managers, reporting level of, 33
- Purchasing partner management (PPM), 5
- Q**
- Quantitative analysis, skills in, 202
- R**
- Ramanathan, V., 43
- Reliability, in relationship with GPO, 111–112
- Requests for information (RFIs), 63
- Requests for proposals (RFPs), 63
- Requests for quotes (RFQs), 63
- Research. *See* ASU/CHMR study
- Research and development (R&D), hospital supply chain and, 11
- Risk: analysis of, 194–195; defined, 44, 48; reducing, by outsourcing through GPOs, 107–109; types of, 49–52, 182
- Risk reduction: with purchasing partners, 66–67; with strategic sourcing, 65, 68–69
- S**
- Safe harbor protection, for GPOs, 104, 123–124
- Safety, improved, as benefit of health care supply chain management, 2
- Sarpong, D. F., 227
- Scanlon, G., 159, 161, 162
- Schneller, E., 224, 225
- Service frame, 36
- Service line specialists, 197
- Shanley, M., 180
- Sharp HealthCare (California), 3, 52
- Shipping costs, 137–138
- Single-use devices (SUDs), reprocessing of, 278n12
- SIRIUS study, 18
- Skills: communication and coordination, 170; network management, 201–202
- Smeltzer, L., 35, 43, 221
- Spang, H. R., 180
- Specialty hospitals, 158, 159–162
- Spectrum Health (Michigan), 3
- Spend analysis, levels of, 53
- Stability, as dimension of environment, 158–159
- Standardization: barriers to achieving, 83–88; benefits of, 2, 72–73; clinician involvement needed for success of, 94–95; cost savings with, 147; defined, 72; gain sharing with, 74, 179, 263–276; inventory and distribution process and, 146–147; metrics for implementing, 95, 96, 97; organizations deciding against, 75; reluctance to engage medical staff in, 86; value analysis and, 74–75
- Steele, P. T., 58
- Steele Case, total cost of ownership analysis by, 46–48
- Steinberg, C., 160
- Stents: Cardiothoracic Center (U.K.)'s purchase of, 234, 236–237, 241; defined, 8; drug-eluting, 9–10, 17–18, 93
- Stock-outs, 12, 145
- Strategic fit: in health care supply chain management, 40–42, 179–182; of inventory and distribution process, 129; levels of development and, 177–178, 192–194; model of, for hospitals and hospital systems, 178–179; outsourcing and, 41, 108; between supply strategy and organizational culture, 155
- Strategic sourcing, 52–65; category and spend analysis in, 52–55, 68, 282n17; cost and price analysis in, 63–64; defined, 52, 282n16; example of, 68–69; fact-based negotiation in, 64–65; market analysis in, 55–58; risk reduction with, 65, 68–69; strategy development in, 58–60; supplier analysis in, 62–63; supplier relationship strategy in, 60–62; as supply chain functional prerequisite, 181
- Strategies: development of, 58–60; different, associated with levels of development, 175–176; organizational, 162–163; supplier relationship, 60–62; supply, 155; supply management, 32–33
- Strategy risk, 49–50, 182
- Strong, J., 116–117
- Structure. *See* Organizational structure
- Supplier analysis, 62–63
- Supplier relationship management (SRM), 5
- Supplier relationship strategy, 60–62
- Suppliers: benefits to, of strategic purchasing process at Cardiothoracic Center (U.K.), 245; clinician customers and, 91–93, 285n49; GPO members purchasing directly from, 153, 214; patient customers and, 93–94; strategic management of relationship with, 89–90; strategy for contracting with, as supply chain functional prerequisite, 181

- Supply chain management:  
 changed orientation of, 33;  
 clinician involvement in, 74–75, 283n6; defined, 30, 125; functions and processes included in, 30–31; health care perspective on, 29–30, 280n16; in hybrid organizational design case study, 259–262; lack of useful knowledge about, 2, 277n6; objective of, 43; resource on, 278n7, 279n12. *See also* Health care supply chain management
- Supply chain managers. *See* Health care supply chain managers
- Supply chains: defined, 5, 29; design requirements of, 164; key areas for comparing, 43; level of power within, 140–142. *See also* Health care supply chains
- Supply management. *See* Materials management
- Supply management strategy: defined, 32; importance of, 32–33
- Supply strategy, strategic fit between organizational culture and, 155
- Surgeons: gain sharing with, 74, 179, 263–276; product selection considerations of, 76–77; supplier relationships and, 91–92, 93
- Sutter Health (California), 3
- Swedish Medical Center (Seattle), 3, 87, 88, 103, 112
- System of exchange, 41, 178–179
- T**
- Tactical goods strategy, 58–59
- Team player physicians, 81
- Teams, in hybrid organizations, 170–171. *See also* Value analysis teams (VATs)
- Technologies: clockspeeds changed by, 167; evaluating new, 95–96, 98; in inventory and distribution process, 133, 147–149. *See also* Information technology (IT)
- Tenet Healthcare Corporation, 4
- Thompson, T., 17
- 3PL, 138
- To Err Is Human* (Institute of Medicine), 42
- Total cost of ownership (TCO), 46–48, 64, 186, 188, 194–195
- Total joint arthroplasty (TJA), reduction of expenses for, 71–72
- Total Quality Management (TQM), 28
- Transaction costs, 45–46; outsourcing and, 105–106; transferred to GPOs, 114
- Transaction focus, in supplier relationship strategy, 60–62
- Transactional frame, 35
- Transformational frame, 36–37
- Transparency: GPOs and, 112, 113; with information technology, 148, 205; price, 50; with regulations on gain sharing, 270, 271
- Trinity Health, 116–117
- Trust, in relationship with GPO, 111–112, 113, 118, 139
- U**
- University Community Health (Tampa), 92–93
- University Health Consortium (UHC), 109, 213, 222
- University of Bath, Centre for Research in Strategic Purchasing Supply, 107
- University of Nebraska Medical Center, 41, 129, 131, 133, 140
- U.S. Department of Justice, 117, 162
- U.S. Senate, 101, 117
- Useful knowledge, 2, 277n6
- V**
- VA Midwest Health Care Network-VISN23 (North Dakota), 3
- Value: complexity of, 39–40; as defined by English National Health Service, 42; in inventory and distribution process, 138–139, 149
- Value analysis: cost savings with, 74–75, 82; GPOs and, 83, 102; levels of development and, 186–188; outcomes of, 94–95
- Value analysis teams (VATs): barriers to standardization overcome by, 84–85, 88; factors affecting success with, 88–89; GPOs working with, 99; role of, 82–83, 94–95
- Value management scorecards, 95, 96
- Value of Group Purchasing Case Studies, 28, 215–223; on contract compliance, 216, 217, 221, 226; on cost and cost avoidance of group purchasing, 216, 217–219; on expectations of GPO members, 219, 220; on measuring outcomes of purchasing practices, 221–223; methodology used for, 215–216; on philosophies of contract utilizations, 219–220
- Vertical integration: in companies outside health sector, 126; levels of development and, 180–181, 183, 184
- Veterans Administration (VA), 3, 4, 287n12
- VHA, 92, 95, 213, 222, 223
- Virginia Mason Medical Center (Seattle), 3, 50
- Volatility amplification, 127
- Volatility of demand, 127
- W**
- Wal-Mart, 125
- Walston, S. L., 32
- Williamson, O. E., 105
- Winkless, T., 79, 80, 81
- Y**
- Young, R. D., 44
- Z**
- Zajac, E., 178
- Zuckerman, H., 180