

Cambridge University Press

978-0-521-83569-5 - Technological Medicine: The Changing World of Doctors and Patients

Stanley Joel Reiser

Index

[More information](#)

INDEX

- Abbott, Gilbert, 169–172
- Abel, J., 32–33, 34
- The Accomplish'd Midwife* (Mauriceau), 163–164
- adaptability, concept of, 150–151, 201–202
- Airs, Waters, Places* (Hippocrates), 131–132
- Albers, Tim, 41
- Alexander, Shana, 44–46
- Altman, Lawrence, 41
- American College of Surgeons (ACS), 79
- American Hospital Association (AHA), 191
- American Medical Association (AMA), 95, 155–156
- American Public Health Association (APHA), 151–152, 155–156
- American Recovery and Reinvestment Act, 98
- costs of, 103
- anatomical defects, 150
- anatomy/anatomization
- historical origins, 4
- influence on medical thinking, 8, 14–15, 187
- anesthesia/anesthetists
- and artificial respiration, 59–61
- in childbirth, 172–173
- and religious factors, 173
- in surgical tests, 169–172
- antiseptic/aseptic procedures, 176–178, 180
- The Art* (Hippocrates), 69–70
- artificial kidney. *See also* kidney dialysis; kidney failure
- creation/development of, 32–33
- as harbinger of new era, 45
- rationing/allocation decisions, 31, 43–44, 46–47
- artificial respirators/respiration
- IPPV treatment, 59–61
- iron lung therapy, 56–59
- religious/moral issues, 52, 61–63, 70
- types/devices, 52–53
- auscultation
- acceptance of, 12
- diagnostic expectations for, 10
- Hippocrates' technique for, 5
- Laennec's book on, 7–8
- learning issues, 9
- subjectivity of medical findings, 27
- autopsy, and diagnosis, 137–138
- bacteria, 18–19
- Baker, S. Josephine, 140–141
- Balfour, Thomas, 113
- Barnard, Christiaan, 64
- Bayle, Gaspard, 4–5
- bellows, in artificial respiration, 52–53
- Berger, John, 27–29
- Berk, H. Th. J., 35
- bias types
- observer, 113–115
- selection, 111–113, 115
- Bingle, Adolf, 115
- birth attendants, 169. *See also* midwife, training/education of
- Bischoff, Johann, 177
- Black's Law Dictionary*, 65
- bloodletting, 105–110
- Bloomingdale Brothers, 22, 24
- Bonomo, Giovanni, 17–18
- Boston Women's Health Book Collective, 182–183
- Breslow, Lester, 152–153
- Brinkman, Robert, 32, 34
- Bureau of the Budget, 48–49
- Bush, George W., 97
- Cabot, Richard C., 77–79, 94
- Cannon, Walter, 77
- cardio-pulmonary resuscitation (CPR), 71, 203

Cambridge University Press

978-0-521-83569-5 - Technological Medicine: The Changing World of Doctors and Patients

Stanley Joel Reiser

Index

[More information](#)

INDEX

- case method of instruction, 77
 “Case Records of the Massachusetts General Hospital,” 78–79
 Casey, Lawrence, 67
 cathode ray, 20. *See also* X-ray
 Catholic/Christian faith, and artificial respiration, 61–63, 70
 Cattell, Henry, 23
 cellophane/cellophane tubing, 32, 34
 cells
 body as “cellular state,” 139
 discovery of, 15–17
Cellular Pathology (Virchow), 139
 Chalmers, I., 118–119, 120
 Chamberlens (English medical family), 163–166
 childbirth. *See also* ultrasound technology
 anesthesia in, 172–173
 and asepsis, 180
 home vs. hospital birth, 179–180, 185
 intervention in, 180–181
 labor, 160–162, 179
 natural, 184–185
 and obstetric forceps, 158, 162–169
 and puerperal fever, 174–177
 social/cultural factors, 159
 technological transformation of, 158, 185
Childbirth Without Fear: The Principles and Practice of Natural Childbirth (Dick-Read), 184–185
 Children’s Hospital in Boston, 54–55, 56–57
 civil rights movement, 181–182
 clinical-pathological correlation, 78–79
 Coalition for Patient Privacy, 101
 Cochrane, Archie, 120
 Codman, Ernest Amory, 79–82, 94
 College of Physicians, 168–169
 College of Surgeons, 168–169
 collodion, 32–33
 community values/perspective
 and artificial kidney rationing, 31, 43–44, 46–47
 and Karen Ann Quinlan case, 68, 70–71
 comparative perspective, in treatment evaluation, 110–111
 computers, in clinical medicine, 90–92. *See also* patient record
 confidentiality, of medical records, 100–102
 congressional hearings, on Medicare, 49–50
 consumers, and personal health records, 100–101
 control groups, 116–117
 controlled trials, 118, 119–121
 Copenhagen polio epidemic, 60–61
 cost-effectiveness. *See also* Oregon Basic Health Services Act
 as means of allocation, 123–124
 cost of care, and patient records, 97–98
 counter-culture movement, 181–182
 CPR (cardio-pulmonary resuscitation), 71, 203
 Crookes tube, 20. *See also* X-ray
 Cullen, William, 2–3, 174
 Cushing, Harvey, 80
 Davy, Humphry, 169
De humani corporis fabrica (Vesalius), 4, 14–15, 137
 de Sauvages, François Bossier, 136
 death
 definitions/concepts of, 62–63, 65
 Natural Death Act, 71
Decorum (Hippocrates), 189–190
 defensive medicine, 102, 219, 220
The Design of Experiments (Fisher), 116
 diagnosis
 and autopsy, 137–138
 and concept of disease, 135–137
 and medical illustrations, 15
 patient’s narrative/subjectivity, 2, 12–13
 and precision of technologies, 28–29
 and screening, 145–150
 and stethoscope invention/usage, 1, 6–9
 X-ray use in, 23, 24–25
 dialogue, in medical relationship, 200–201
 Dick-Read, Grantly, 184–185
 diphtheria treatment research, 115
 disability, physical, 150
 disease prevention, 140–145
 diseases. *See also* diagnosis; puerperal fever
 bacterial sources of, 18–19, 139
 classification of, 2–3
 as entities, 135–137, 139
 as having seats, 4
 screening for, 145–150
 treatment of, 8–9
 DNA markers, 154
 Do Not Resuscitate (DNR) order, 71–72
 doctor/patient relationship, 1, 7–8, 12–13, 181–182, 190–191. *See also* dialogue, in medical relationship
 Doll, Richard, 119
 Donald, Ian, 195
 double-blind controlled trials, 119–120
 Drinker, Philip, 54–56
 Dubos, René, 201–202
 Durable Power of Attorney for Health Care, 71
 Dye, N. S., 179

Cambridge University Press

978-0-521-83569-5 - Technological Medicine: The Changing World of Doctors and Patients

Stanley Joel Reiser

Index

[More information](#)

INDEX

- early detection, of disease, 140–145. *See also* diseases
- Eastman, George, 19–20
- Edison, Thomas Alva, 23
- education, and patient record use, 77–79
- effectiveness, of technologies, 50–51, 121
- Effectiveness and Efficiency* (Cochrane), 120
- Ehrlich, Paul, 187
- electronic fetal monitoring (EFM), 219
- electronic health record (EHR), 96–99. *See also* patient record
- End Result System, 80–82
- “English Hippocrates.” *See* Sydenham, Thomas
- environmentalist concept of health, 130–132, 150–151, 157
- epidemics, polio, 60–61
- ethics
 - and artificial respiration, 61–63
 - committees, 68–69, 72–73
 - medical ethics renewal, 181–182
- evidence
 - of illness, 5
 - of patient narrative, 26
 - and X-rays, 27, 28
- examination, periodic medical, 140–145
- experience, Louis’ critique of, 108–109
- false negative tests, 145
- false positive tests, 145, 149
- Feingold, Eugene, 155–156
- Feinstein, Alvan, 91–92
- Ferguson, Tom, 193–194
- Fisher, R. A., 116
- follow-up system, 82–83
- forceps. *See* obstetric forceps
- Fremont-Smith, Maurice, 144
- Galen (Greek physician), 105
- genetic science developments, 153–155
- genetic testing, 149
- genome mapping, 153–155
- Glasser, Otto, 21
- Glazer, Nathan, 49
- Google, and personal health records, 100–101
- Gordon, Alexander, 174–175
- Gottschalk, Carl, 48–49
- government
 - and medical technology limits, 70–72
 - oversight of medical care, 94–96
- Graham, Thomas, 32
- The Grammar of Science* (Pearson), 27
- Greeks, ancient. *See also* Hippocrates/Hippocratic writings
 - Galen, 105
 - health/illness concept of, 130–131
 - medical information disclosure, 189–190
 - Greenwood, Major, 115–116
 - Grossman, Jerome, 95–96
- Haas, George, 33, 34
- Haid, Bruno, 61
- haplotype maps/bins, 154
- Hart, Philip D’Arcy, 118
- Harvard Law School, 77
- health maintenance organizations (HMOs), 95–96
- Health Online*, 193–194
- health promotion, 152–153
- health/illness concepts
 - cellular changes, 139
 - environmentalist concept, 130–132, 157
 - periodic medical examination, 140–145
 - structuralist concept, 132–133, 138–139, 150–151
- Hearst, William Randolph, 23
- heparin, 33, 34
- Hermann Hospital, 71–72
- high technology, as form of care, 50–51. *See also* technology
- Hill, Austin Bradford, 115–119
- HIPAA legislation, and confidentiality and privacy, 101–102
- Hippocrates/Hippocratic writings. *See also* Greeks, ancient
 - auscultation technique, 5
 - background/views of, 130–131
 - and bloodletting, 105
 - essays, 131–132, 189–190
 - patient-driven narratives, 1–2
 - therapeutic power, 69–70
- hirudin, 32–33
- HMOs (health maintenance organizations), 95–96
- Holmes, Oliver Wendell, 10–11, 175, 206
- Hooke, Robert, 15–17
- Hope, James, 12
- Hornby, John, 83–84
- hospitals
 - and birth, 174, 178–179
 - infection in, 174–175
- humors
 - balance of, 133
 - and bloodletting, 105–106
 - relation to health/illness, 130–131
- Humphreys, D., 176
- Ibsen, Bjørn, 60
- illness/health concepts
 - cellular changes, 139
 - environmentalist concept, 130–132, 157
 - periodic medical examination, 140–145

Cambridge University Press

978-0-521-83569-5 - Technological Medicine: The Changing World of Doctors and Patients

Stanley Joel Reiser

Index

[More information](#)

INDEX

- illness/health concepts (*cont.*)
 structuralist concept, 132–133, 138–139, 150–151
- images
 and disease diagnosis, 15
 as evidence, 24–25, 27, 28
 photographic, 19–20
 X-ray, 14
- infection, in hospital environments, 174–175
- information, withholding of medical, 189–193
- innovation, and learning issues, 9
- institutions, and medical technology limits, 72–73
- insurance coverage. *See also* Medicare/Medicaid
 and Oregon Basic Health Services Act, 121–128
- intermittent positive pressure ventilation (IPPV), 59–61
- International Committee of Medical Journal Editors, 120–121
- Internet collaboration, 193–194
- iron lung, 56–59. *See also* artificial respirators/respiration
- Jackson, Henry, 48–49
- Jackson, James, 106–108
- Karmel, Marjorie, 184–185
- Keep, Nathan Cooley, 172
- kidney dialysis
 center-based, 40–41, 42
 cost/financial support of, 42, 43, 47–48, 208
 home-based, 41, 48
 Medicare funding, 49–50
 rationing/allocation decisions, 31, 43–44, 46–47
 and transplantation, 41–42
- kidney failure. *See also* artificial kidney
 and dialysis treatment, 37, 40–41
 government focus on, 48–49
 and Medicare law, 49–50
 study of, 33
- Kings County Medical Society, 42–43
- Koch, Robert, 18–19, 139, 175–176
- Kolff, Willem, 31–32, 34–39, 46
- Koop, C. Everett, 156
- Korean War, 40
- Kubrick, Stanley, 199
- labor, in birth, 160–162, 179. *See also* childbirth
- Laennec, René, 1, 4–8, 94, 187
- Laget, M., 162
- Lalonde, Mark, 152–153
- Lamaze, Ferdinand, 184–185
- landmark experiments, 117–120
- Langdell, C. C., 77
- Lassen, H. C. A., 60
- Levitt, J. W., 159
- Life Extension Institute, 141–142, 143
- Lind, James, 111–112
- Lister, Joseph, 176–177
- living will, 71
- Longfellow, Fanny, 172
- Loudon, I. S. L., 168
- Louis, Pierre, 108–111
- Lowe, Jacob, 24
- lying-in hospital, for birthing needs, 174
- Magendie, François, 8
- Man Adapting* (Dubos), 201–202
- March of Dimes, 59
- Martin, William J., 23
- masking methods, 114–115
- Massachusetts General Hospital (MGH), 74–76, 86, 169–172
- Massachusetts Medical Society, 171–172
- Mauriceau, François, 163–164
- Mayo brothers, 76–77, 86–87
- McGill University, 23
- McKhann, C. F., 55–56
- measles, 135
- medical education, and patient record use, 77–79
- medical error reduction, 96–97. *See also* patient record
- Medical Ethics* (Percival), 171–172
- medical examination, periodic, 140–145
- medical information, withholding of, 189–193
- medical record. *See* patient record
- Medical Research Council, 117
- Medicare/Medicaid, 49–50, 95, 121–128
- medicine
 and objectivity, 26
 as profession, 3, 9–10
 as science, 12–13
 “truth” in, 29
 in visual age, 14
- Medicine/Public Health Initiative, 155–156
- membrane research, 32
- Mesmer, Franz Anton, 113–115
- Metropolitan Life Insurance Company, 144
- Micrographia* (Hooke), 15–17
- microscope, 15–18, 19, 139
- Microsoft, and personal health records, 97
- midwife, training/education of, 159–160, 169
- The Modern Hospital* (Hornby), 83–84
- Monro, Alexander, 2–3
- moral guidance, 52. *See also* ethics

Cambridge University Press

978-0-521-83569-5 - Technological Medicine: The Changing World of Doctors and Patients

Stanley Joel Reiser

Index

[More information](#)

INDEX

- Morgagni, G. B., 4, 137–138, 186
 mortality reduction, 177–178
 Morton, William T. G., 169–172
 Mountain Electric Company, 23
 multiphasic population screening, 146–148
- narrative. *See* patient's narrative/
 perspective
- National Academy of Sciences' Institute of
 Medicine, 96
- National Foundation for Infantile
 Paralysis, 59
- National Health Council, 142–143
 National Institutes of Health, 48–49
 Natural Death Act, 71
 Necheles, Heinrich, 33
 negative pressure devices, 52, 53. *See also*
 artificial respirators/respiration
- The New England Journal of Medicine*,
 78–79
- New Jersey Supreme Court, 65, 66–69
*A New Perspective on the Health of
 Canadians* (Lalonde), 152–153
- Nightingale, Florence, 76
- Nosologia methodica, sistems morborum
 classes, genera et species* (de
 Sauvages), 136
- numerical method, in treatment evaluation,
 110–111
- Obama, Barack, 98
- objectivity. *See also* patient's
 narrative/perspective
 in depiction of illness, 27–29
 elimination of subjective elements, 29–30
 of medical findings, 26
 of photography/X-rays, 26–29
- observer bias, 113–115
 observer variance, 19, 28
- obstetric forceps
 concealment of, 158, 164
 origins/use of, 162–169
- “On a New Kind of Rays, A Preliminary
 Communication” (Röntgen), 21
- Oregon Basic Health Services Act, 121–128
 “Osmotic Force” (Graham), 32
- Our Bodies, Ourselves* (Boston Women's
 Health Book Collective), 183–184
- Outdoor Department (New York Lying-In
 Hospital), 178–180
- Pasteur, Louis, 175–177
- pathology
 clinical-pathological conferences, 77–79
 study of, 4
- patient record
 adequacy of, 83–84
 computerization of, 90–92, 96
 costs of, 103
 in doctor's head, 84–85
 electronic health record (EHR), 96–99
 End Result System, 80–82
 ethical/legal dimensions, 102
 follow-up system, 82–83
 and government/social oversight, 94–96
 HIPPA legislation, 101–102
 hospital standards/record keeping, 79,
 85–86
 in medical education, 77–79
 and Medicare/Medicaid, 95
 mission of, 74
 multiple use fulfillment, 102–103
 19th century development of, 74–77,
 103
 personal health record, 100–101
 PROMIS, 92–94
 and quality of care, 79
 and specialization, 85
 standardization, 87–90
 telecommunications, use of, 94
 unified records, 86–87
 unifying role, 103–104
- Patient's Bill of Rights, 191
- patient's narrative/perspective
 and diagnostic technologies, 12–13
 in early works of medicine, 1–3
 rejection/disregard of, 26, 27
 truth of personal meaning, 29
- Pearl, Raymond, 87–89
- Pearson, Karl, 27
- pectoriloquism, 7
- Peebles, Allen, 84–85
- Percival, Thomas, 171–172
- periodic medical examination, 140–145
- personal health record, 100–101. *See also*
 patient record
- Petchesky, R. P., 199
- Peterson, Osler, 84–85
- photography, 18–20, 26–28
- phthisis. *See* tuberculosis
- physical examination. *See also* periodic
 medical examination
 doctors' restraint in, 3
 and modesty/privacy, 4–5
 periodic, 140–145
 vs. technological examination, 24–25,
 29
- The Physician* (Hippocrates), 132
- Physician Standards Review Organizations,
 95
- physicians
 and medical technology limits, 71–72
 medication information disclosure,
 189–193
 and periodic examinations, 143–145
- Pintard, John, 151–152

INDEX

- Pius XII (pope), 52, 61–63, 70
 poliomyelitis
 epidemics, 54–55, 60–61
 IPPV treatment, 59–61
 iron lung therapy, 56–59
 ventilator/respirator development, 55–56
 popes. *See* Pius XII (pope)
 population screening, multiphasic, 146–148
 positive pressure devices, 52. *See also* artificial respirators/respiration
 precision, as technologic value, 28–29
 Presbyterian Hospital (New York), 82–83, 86–87
Principles of Medical Statistics (Hill), 116–117
 priorities, in Oregon Basic Health Services Act, 123–124
 privacy
 and auscultation usage, 4–5
 of medical records, 100–102
 and X-rays, 22
 prognostic medicine, 133–134
 PROMIS (Problem-Oriented Medical Information System), 92–94
 prophylactic dialysis, 40. *See also* kidney dialysis
 public health, 151–157
 Public Health Service, 48–49
 puerperal fever, 174–177

 Quinlan, Joseph, 66–68
 Quinlan, Karen Ann, 65–69, 70–71
 Quinton, Wayne, 41

 random assignment, 115–120
 randomized controlled trial (RCT), 119–121
 rationing/allocation decisions
 of artificial kidneys, 31, 43–44, 46–47
 of iron lung treatment, 58–59
 in Oregon Basic Health Services Act, 124–127
 religious issues
 and anesthesia in childbirth, 173
 and artificial respiration, 61–63, 67, 70
remèdes secrets, 167
 respirator. *See* artificial respirators/respiration
 resuscitation, 52, 71. *See also* artificial respirators/respiration
 Röntgen, Wilhelm, 20–21
 Roosevelt, Franklin, 59
 Rothman, B. K., 199
 Rountree, L., 32–33
 Royal Humane Society of England, 52–53
 Rueff, Jacob, 162–163

 Rush, Benjamin, 106

 Saetman, A. R., 200
 scabies, 17–18
 Schatz, Albert, 117
 schools, periodic medical examination in, 140–141
 Schreiner, George, 49
 scientific frame of mind, 27
 screening, for disease, 145–150
 Scribner, Belding, 40–41, 42–43, 48, 49
 scurvy treatment research, 111–112
The Seats and Causes of Diseases Investigated by Anatomy (Morgagni), 4, 137–138
 Seattle Artificial Kidney Center, 42–43
 secret remedies, 166–167, 171–172
 selection bias, 111–113
 self-help groups, 193
 Semmelweis, Ignaz, 176
 Shalala, Donna, 156
 Shaw, Louis, 55–56
 Shields, Clyde, 41, 42
 shunt, for artificial kidney dialysis, 40–41
 Sidorow, Jason, 97
 Simpson, James Y., 172, 173
 Smellie, William, 158, 168
 Snow, John, 173
 Society of Medical Observation, 108
 Sorcerer's Apprentice, 73
 specialization, and patient records, 85. *See also* patient record
 St. Mary's Hospital, 76–77
 standardized record, 87–90. *See also* patient record
 stethoscope
 and diagnosis/diagnostic technique, 6–9
 discovery/invention of, 4–6, 187
 and doctor/patient relationship, 12–13
 as medical revolution source, 1
 obstacles/barriers to acceptance, 9–10
 patient/public response to, 11–12
 stopper, 206
 vs. X-ray, 26
 “To the Stethoscope” (poem), 11
 “The Stethoscope Song” (Holmes), 10–11
 Stoeckle, J. D., 190–191
 stopper (stethoscope component), 206
 streptomycin, clinical trial of, 117–120
 structuralist concept of health, 130, 132–133, 138–139, 150–151
 subjectivity. *See also* patient's narrative/perspective
 and auscultation, 27
 elimination by objective elements, 29–30
 of medical findings, 29
 of narrative evidence, 26
 in photography, 26–27

Cambridge University Press

978-0-521-83569-5 - Technological Medicine: The Changing World of Doctors and Patients

Stanley Joel Reiser

Index

[More information](#)

INDEX

- Supportive Care Protocol, 71–72
 surgery/surgeons, 9–10, 23
 Swedish Hospital of Seattle, 42–43
 Sydenham, Thomas, 133–137, 138, 186
 Symcotts, John, 2
 symptoms
 categories of, 134
 and concept of disease, 135–137
 syphilis, screening for, 146
 systematic research reviews, 120–121
- “technological breakthroughs,” 1
 technology
 absorptive/reflective nature of, 186–188
 advocacy of new, 29–30
 influence on patient care, 50–51
 limits on use, 70–72
 nature of, 51
 relation to humanism, 188–189,
 201–203
 spending on, 51
 telecommunications, use of, 94. *See also*
 patient record
 Teschan, Paul E., 40
 Thalhimer, William, 33–34
Thank You, Dr. Lamaze (Karmel),
 184–185
 “They Decide Who Lives, Who Dies”
 (Alexander), 44–46
 transplantation
 ethics and, 63–65
 of kidneys, 41–42
 and Oregon Basic Health Services Act,
 121–122
Treatise on Diseases of the Chest, and on
Mediate Auscultation (Laennec), 7–8
 treatment evaluation, numerical method in,
 110–111
 tuberculosis, 7, 18–19, 134–135
 Turner, B., 32–33
2001: A Space Odyssey, 199
- ultrasound technology, 194–200
 unified record, 86–87. *See also* patient
 record
 unions, and worker health, 141
- Van Helmont, Jean Baptiste, 111
 Van Leeuwenhoek, Antoni, 18
 Van Noordwijk, Jakob, 36
 ventilators, 53. *See also* artificial
 respirators/respiration
 Vesalius, Andreas, 4, 14–15, 52–53, 137
 Veterans Administration, 48–49
 Virchow, Rudolph, 139
- Waitzkin, H., 190–191
 Waksman, Selman, 117
 Wald, Lillian, 140
 Walter Reed Army Hospital, 48
 Warren, John Collins, 169–172
 Wasserman test, 146
 Web-based information system, 97
 Weed, Lawrence, 92–94
 Wilbanks, E. R., 166–167
 Williams, Francis, 24
 Wilson, J. L., 54–55
 Winterscheld, Loren, 41
 women’s health movement, 181–184
 workplace
 period medical examination in, 141
 physical handicaps in, 150
 World Health Organization (WHO),
 152–153
 World War I, and national fitness, 129,
 142
 World War II
 artificial kidney creation, 31–32
 radiation danger awareness, 24
 X-ray interpretation, 28
 Wright, James Homer, 77–79
- X-ray
 diagnostic reliance on, 24–25
 discovery/invention of, 20–21
 health damage/radiation dangers, 23–24
 objectivity/authenticity of, 26–29
 in obstetrics, 221
 public/professional reaction to, 21–23
 as screening agent, 145–146
 vs. stethoscope, 26
- Young, James, 180