Index

A

abnormal sleep/wake patterns 279
abortion 234, 235, 236
Accrediting Council for Graduate Medical Education (ACGME, 2007) 304
accumulation of knowledge 103
Action Control Agents (ACA) 197, 202
Acumenella Health 180
acute respite 255, 265
adaptive learning agent 198
ADSL (Asymmetric Digital Subscriber Line) 329
adverse drug effect (ADE) 62, 81
Ageing effect 153
ageing populations 143
Amalga 181, 182
American National Standards Institute (ANSI) 43, 44, 46
analyzing human behavior 195
application of IT 335
Applications of biotelemetry 17
Applications of telemedicine 14, 17
AQUA (A Query Analyzer) 19
artificial intelligence (AI) 154, 176, 193
Art of Medicine Survey 304
A Socio-Economic and Health Care Support System (SEAHCSS) 316
asynchronous transfer mode (ATM) 4
Australian Department of Health and Aging 267, 275
Australian healthcare 267, 268, 273, 275
Automation 40
Autonomy 95, 97, 99

B

Basic IT Strategy 328, 329, 336
Bayesian belief net 186
Bayesian belief networks 186
Bedside Medication Verification (BMV) 31, 32, 40
Behavioural Observation 288
Beneficence 94, 97, 99
Biomedical data 9, 17, 194
biomedical issues 97
biomedical knowledge-bases 193, 194
biomedical systems 192, 193, 195
Biomedical telemetry 2, 12, 17
bio-ontologies 192
biotelemetry 1, 2, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
BIRADS UMLS 19
Blueprint Centre for Learning 256, 257, 265
BMV systems 32, 33, 36, 37, 38, 39, 40
body mass index (BMI) 261, 262
BPR (Business Process Reengineering) 332
Brazilian health card 243, 247, 249
British National Health Service 226
Broadband for Health Program 167
Business Process Reengineering (BPR) 36

C

CAM modalities 83
case-based reasoning (CBR) 155, 157, 176
CATV (Cable Television Networks) 329
CBR system 155, 157, 158, 164, 173
CEN Technical Committee (CEN/TC) 43
central haemodynamics 10
Index

Centre for Global Education and Research (CGER) 315
chemical pathology 204
chronic obstructive pulmonary disease (COPD) 93
Clementine 85, 86, 87, 88
Clinical Document Architecture (CDA) 42
co-creation 137
Communication Authorities 285
Community Care 182, 188
community support 253, 263
computer-based messages 66
crane on wheels (COW) 34, 40
crane tomography (CT) 19, 43, 46
Computer Vision 176
concept lattice 165, 166
congestive heart failure (CHF) 93
context table 165
Continuous Positive Airways Pressure (CPAP) 290, 302
COPD 93
Crisis respite 255, 265
Cross Enterprise Document Sharing (XDS) 48
crane on wheels (COW) 34, 40
crane tomography (CT) 19, 43, 46
Computer Vision 176
concept lattice 165, 166
congestive heart failure (CHF) 93
context table 165
Continuous Positive Airways Pressure (CPAP) 290, 302
crisis respite 255, 265
Cross Enterprise Document Sharing (XDS) 48
CT (Computed Tomography) 18
CT scan image mapping 187
CT scans 18, 19, 20, 21, 23, 25, 26, 27, 28, 29

D

Data collection 168
data exchange between institutions 129
data mining 82, 83, 84, 85, 89, 176, 188
daytime sleepiness 289, 290, 291, 292, 297, 300, 301
Decision Support Systems 176
Diabetes mellitus 57
DICOMDIR file 120
DICOM files 119, 121, 126
DICOM image data 123, 124, 125
DICOM Modality Worklist (DMWL) 118, 122, 125
DICOM Uploader Client 123
Differential Count (DC) 205
Diffusion of Innovation (DOI) 269
Digital Imaging and Communication in Medicine (DICOM) 42, 43, 59
digital libraries 192, 193, 194
digital signature 67, 68, 70, 71
direct network 118, 133
Discovery Research Laboratory (DRL) 315
discrete subsystems 319
Distributed Stream Analysis 176
Distributive Justice 94, 99
District Health Boards 255
Disturbed sleep 281
Doctors Interpersonal Skills Questionnaires (DISQ) 306
Document Type Definition (DTD) 45
Do not resuscitate (DNR) 106
DPC (Diagnosis Procedure Combination) 335
drug precipitin 71
E

Eastern Goldfields 154
Eastern Goldfields Regional Reference Site (EGRRS) 160
Economic Impact 13
efficiency gains 64
e-government initiatives 242, 243
e-health 2.0 199
e-healthcare interfaces 147
e-health systems 147, 192, 193, 195, 196, 200, 232, 238, 239
e-Japan Priority Policy Program 329
E-Japan Project 327, 332
e-Japan Strategy II 332, 333, 334
e-learning 107, 115, 117
 electrocardiogram (ECG) 2
electroencephalogram (EEG) 2
electro-magnetic induction fields 286
‘electro-mechanical’ (EM) 145
electromyogram (EMG) 2
Electronic Frontiers Australia – EFA 245
electronic health records (EHRs) 42, 43, 101, 115, 116, 117, 245, 289, 299
electronic medical record (EMR) 81, 104
Electronic Medication Administration Record (eMAR) 31, 32, 40
Electronic Patient Record (EPR) 246
Index

electronic transmission of prescription (ETP) 61, 63, 81
eMAR documentation 31, 32
emergency care summary (ECS) 183
Enhanced Mobile Support 255, 265
e-prescription 61, 62, 63, 64, 65, 66, 67, 68, 70, 71, 72, 73, 74, 75, 76, 77, 81
e-Prescription process 65
e-Prescription system 63, 66, 81
EPR systems 181
Epworth Sleepiness Scale 291, 301
ETP deployment 76
ETP system 63, 64, 65, 73, 74, 77
European healthcare market 181
Explorer Agents (EA) 197, 202
eXtensible Markup Language (XML) 42, 43, 60, 293
Extensible Stylesheet Language Formatting Objects (XSL-FO) 55
external powering system 8
Eye Care Displayable Report (ECDR) 49
Eye Care Evidence Document (ECED) 49
Eye Care Workflow (EYECARE) 49

F

Five Rights of Medication Administration 32, 34, 35, 40, 41
Food and Drug Administration (FDA) 33
Formal Concept Analysis 164, 165, 174, 176
formal concept analysis (FCA) 160, 164, 165
fraud reduction 64
frequency shift keying (FSK) 11
Functional demand 141, 153

g

general practitioner (GP) 136, 154, 156
General Question (GQ) 159
Generation effect 153
Generation Timeline Tool (GTT) 145
Geographical Information Systems 176
global healthcare 219
global society 102
Globus MEDICUS project 130
GP-patient interaction 155
GP query system 159
graphical user interface (GUI) 196

H

hackers 73
haematologic parameters 206
haematology 204, 206, 208, 215, 216
Haemoglobin (Hb) 204, 211
Health and Human Services (HHS) 180
Health Authority 333
Healthbase 225
healthcare costs 92, 94
healthcare delivery 134, 136, 138, 150
health care indicators 242, 243
healthcare professionals 267, 272, 273, 275, 320
healthcare services 92, 93
health information sharing (HIS) 104
Health Level Seven (HL7) 42, 43
Health management 92, 93, 94, 99
health management decisions 92
Health Promotion England 140, 150
health-related systems 195
health tourism 219, 225, 226, 231
health tourists 226, 227, 228
Healthy Lifestyles 257, 258
Help 4U’ 261, 263
Hermeneutics 247
high-risk behaviors 232, 233, 234, 237
high speed digital communication networks 327
HIMS framework 189
histopathology 204
HIV/AIDS 234, 235, 237, 238, 239
HIV epidemiological surveillance 232
HIV infection 232, 233, 234, 235, 236, 237, 238, 240
HIV prevention policies 238
Hospital implementation of eMAR 38
Hospital Information Management System (HIMS) 177, 315, 316, 324
hospital information system (HIS) 104
human intervention 193, 196, 200
human relationships 139
Human rights 96, 97, 99
human to human interaction 105
Hypertext Transfer Protocol over SSL (HTTPS) 42, 44, 50
medical prescriptions 61, 64, 81
medical service management system 334
medical specialities 6, 7
medical tourism 217, 218, 219, 220, 221, 222, 223, 224, 225, 228
Medical tourism 219, 229, 230
Medication Administration 31, 32, 34, 35, 38, 39, 40, 41
medication administration errors 33, 37, 38
Medication Error 40
Ministry of Health’s Mental Health Information National Collection database (MHINC) 257
Misclassification approach 164
Mobile Internet Platform (MIP) 112
mobile network web support 111
modern medicine 102
modern scientific methods 82
modular framework 122
myocardial infraction 291

N
National Aeronautics and Space Administration’s (NASA’s) 7
National Center for Complementary and Alternative Medicine (NCCAM) 83
National Electrical Manufacturers Association (NEMA) 46
National Health and Medical Research Council (NHMRC) 160
National Health Card 243, 248
National Health scheme 222
National Health Service (NHS) 65, 226, 246
National Institutes of Health (NIH) 83
National Rheumatoid Arthritis Society (NRAS) 136
Nationwide deployment 77
Negotiation 197, 199, 202
New Dynamics of Ageing programme 148
NHS Care Records Service 181
Night time waking 283
Non-Government Organization (NGO) 254
Nonmaleficence 94, 99
Non-structured PHRs 114
NREM sleep 280
NVivo 271, 272
NVivo software application 271

O
Obstructive Sleep Apnea (OSA) 290, 302
Online Medical Service Billing System 332, 334
OpenEHR 44, 48
organizational behaviors 195
Osaka Medical Practitioners Association 334
outcomes-based research 304
out patient department (OPD) 105

P
Packed cell volume (PCV) 205
paper-based prescription 61, 62, 63, 69, 73, 76, 77
Partially protects 68
Pathways New Zealand 253, 254, 255, 258, 264, 265
Patient Empowered Healthcare 107
Patient Empowerment and Environmental Control Support System (PEECSS) 316, 322
patient medical record (PMR) 44
Patient needs 113
Patient Pathways of Care (PPC) 136
PDA-elog 106
Percentage of Sleep 288
Percentage of Wake 288
personal computers (PC) 328
personal digital assistant (PDA) 72, 106, 116
personal health record (PHR) 110, 114, 115
Personal Prescription and Preferences Record (PPPR) 324
Pervasive Computing 176
PHACTS 257, 258, 264
Pharmacy2U model 68
planned respite 255, 265
Platelet Count (Pl. Count) 205
Polysomnography 288
population demographics 135, 137
Portable Document format (PDF) 55
post-DISQ 306, 307, 308, 309
post-intervention outcomes 305
Predictive modeling 92, 93, 94, 96, 98, 99
pre-DISQ 306, 307, 308, 309, 310, 311
Prescription Pricing Authority (PPA) 64
presentation technologies 4
Primary Health Organizations (PHOs) 254
Principle of Nonmaleficence 94
Privacy principles 285
PROTEUS-BIO 19
providing aged care 287
PubMed 187
pulsed direct current (PDC) 84

Q
quality-of-life 138, 139, 140
Quality of Service in Ad-Hoc Mobile Networks 176
Quality of Service (QoS) 284

R
radio frequency (RF) telemetry 11
Radio Frequency Tags (RF Tags) 282
radiological image data 118, 119, 133
Radiology Information System 122, 126
raison d’être 220
randomized control trial (RCT) 109
Reasoning Agent 198, 202
Red Blood Cell count (RBC) 204
Reference Information Model (RIM) 45, 52, 60
rehabilitation 315, 316, 321, 322
religious pilgrimage 224
REM sleep 280
Residential-Based: Support Solutions 265
resistance measurement (RES) 84
Respite Options 255, 265
Retinopathy (RD) 43
risk-taker 234
risky sexual behavior 234, 237
RLR framework 197, 198, 200
rural regions 335

S
Salford model 70, 71
Scottish Consumer Council 183
Secure Sockets Layer (SSL) 42, 44
Security and Confidentiality 13
Self Care 182, 188
Self-Monitoring 302
self-organizing map (SOM) 18, 84
sexual behaviors 234
sleep apnea 287
Sleep Bouts 288
sleep diary 289, 290, 292, 293, 294, 295, 297, 298, 299
Sleep disorders symptoms 289
Sleep Efficiency 280, 288
Sleep Hygiene 291, 302
Sleepiness 291, 301, 302
Sleep Investigation Unit (SIU) 290
sleep patterns 289, 290, 292, 293, 295, 297, 298, 299
Smart Homes 176
SMS (short messaging system) 109
snack pubs 233
SNOMED 19
soap-land 233
SOM applications 22
SOM clustering 18, 23, 26, 29
SOM methods 21
SOM techniques 21
Specific Question (SQ) 159
Speed of Communication 13
State and Commonwealth Research Issues Forum (SCRIF) 160
Stroke Information System (SIS) 177, 188
stroke special unit practice 178, 179, 187
Structured Query Language (SQL) 60
Subjective Assessment Tools 288
Summary Care Records (SCRs) 182
Supervised Machine Learning 176
Supervised neural networks 186
Surveillance Systems 176

T
TACMIS 177, 178, 179, 180, 181, 182, 183, 185, 187, 188, 189, 315, 316, 317, 318, 319, 320, 321, 322, 324, 325
Technology Acceptance Model (TAM) 268
Technology Seeds Seminars 316, 324
Telederm 154, 155, 159, 160, 161, 162, 163, 164, 166, 167, 168, 170, 171, 172, 173, 174
telemedicine 1, 2, 3, 4, 5, 6, 7, 12, 13, 1
4, 15, 16, 17, 43, 57, 58, 59, 130, 1
54, 155, 156, 157, 174, 175, 176, 33
5, 336
tele-medicine solutions 119
Telemetry types 17
text mining 18, 19, 21, 26, 29
tf–idf weight (term frequency–inverse document frequency) 24
the IT revolution 328
Theory of Planned Behaviour (TPB) 268
Theory of Reasoned Action (TRA) 268
therapeutic methodologies 82
Total Access Port (TAP) 317, 318
Total Access System (TAS) 317, 318
tourist attractions 222
training programmes 303, 305, 313
Transitional Housing 256
transplant tourism 228, 231

U
ubiquitous telematic devices 323
Unified Theory of Acceptance and Use of Technology (UTAUT) 269
Uniform Resource Identifier (URI) 51
universal design (UD) 137, 178
unorthodox methodology 89
unsafe practices 236
user driven health care
  101, 102, 108, 109, 116, 117

V
Value Driven Healthcare movement 107
Value Judgment 97, 99
Venous blood 208
VICON model 141
Virtual Private Networking 131
Viscovery SOM 23
Viscovery SOMine 23
Visual Prompt Cards (VPCs) 146, 147
visual sleep assessments 286

W
Waikato District Health Board 255, 260
Waikato Institute of Technology (WINTEC) 253, 257
Wake Bouts 288
Web 2.0 technology 107, 108
Web based-learning 113
‘wellness’ tourism 217
Western Australian Goldfields 174
western medicine 82, 83
White blood cell count (WBC) 205
wide area network (WAN) 5
WIMAX (Worldwide Interoperability for Microwave Access) 116
Wireless Application Protocol Gap 284
wireless technology 281, 282, 283, 284, 285, 286, 287
Wireless technology 281
Workwise 256, 265, 266
World Health Organisation 178
Wrist actigraphy
  279, 280, 283, 286, 287, 288