Index

A

Alcohol intake, 47, 48
Aminoglycoside antibiotics, 5
 Amitriptyline, 48
Amphetamine abuse, 47
Antidepressants, 48
Anxiety, 47, 48, 69
Anxiolitics, 48
Appendixes. See Forms
Aspirin, 5, 48
Assessment. See also Audiologic Evaluation; Interdisciplinary Evaluation
mental health, 67–70
psychoacoustic, 72–73
Attention-deficit/hyperactivity disorder, 47
Attention Scale, 61, 129–130
Audiologic Evaluation
 auditory function assessment, 42–43
and candidacy for Group Education, 40
Ear-Level Instrument Assessment/Fitting Flowchart, 45, 113
hearing aid evaluation, 45–47 (See also Hearing aids main entry)
Hearing Aid Special Considerations, 46, 115
Hearing Handicap Inventory, 42
and hyperacusis, 40, 41
LDLs, 53
and mental health referral, 47
objectives overview, 39, 99
otolaryngology exam need assessment, 43
otoscopy, 42
overview, 27, 49
patient example: sensorineural hearing loss, 41
procedures overview, 39, 99
pure-tone threshold evaluation, 42–43
sleep disorder referral assessment, 47–48
somatosounds assessment, 43–44
suprathreshold audiometric testing, 43
THI (Tinnitus Handicap Inventory), 41–42, 105–106, 107
THS (Tinnitus and Hearing Survey), 39–41, 101
Tinnitus Handicap Inventory (THI), 41–42
Tinnitus Problem Checklist, 44–45
Audiology, 24
 Individualized Support protocol, 77–79
 patient education, 26
triage to, 37
Auditory imagery, 4

B

Bipolar disorder, 47

C

Caffeine intake, 5, 48
Case studies/patient examples
bilateral intermittent tinnitus, 32–33
bothersome tinnitus, 33
CBT (cognitive-behavioral therapy), 81
hearing loss/tinnitus, 32
Individualized Support, 81
phonophobia, 33
PTSD, 33
sensorineural hearing loss, 41
CBT (cognitive-behavioral therapy)
case study, 81
clues for tinnitus management, 3
extended support option, 81–82
Group Education, 63–66 (See also Group Education main entry)
Individualized Support, 80–81, 82
and individualized support level, 30
and patient education, 25, 31
in PTM foundational research, 17, 18–19
and STEM, 29, 55
telephone-based, 18
CD/DVD: Managing Your Tinnitus, 151–152
Changing Thoughts and Feelings Worksheet, 64
Chemotherapy, 5, 48
Chronic tinnitus, 2. See also Tinnitus
Cisplatin, 5
Clinical data of patients (tinnitus), 8–9
Clinical trial candidacy, 12–13
Cocaine abuse, 47
Cochlear cellular stress responses, 36
Cognitive-behavioral therapy (CBT). See CBT (cognitive-behavioral therapy)
Cognitive restructuring, 65–66
Combination Instrument In-Clinic Trial Use, 75, 147
Conductive tinnitus, 6, 7
Corticosteroids, 36

D

Depression, 47, 69
Diuretics, 5, 48
DVD/CD: *Managing Your Tinnitus*, 151–152

E

Ear-Level Instrument Assessment/Fitting Flowchart, 45, 46, 70, 74, 113
Ear-Level Instrument In-Clinic Trial Use, 145
Ear-Level Instrument Trial Use Guide, 75, 143
Ear noise, transient, defined, 1–2
Education. See Group Education
Epidemiology, 6
Epworth Sleepiness Scale, 69, 141
Etiology of tinnitus, 6
Evaluation. See Audiologic Evaluation
Examples. See Case studies/patient examples

F

Forms
  Attention Scale, 129–130
  Audiologic Evaluation objectives/procedures overview, 99
Combination Instrument In-Clinic Trial Use, 147
Ear-Level Instrument Assessment/Fitting Flowchart, 113
Ear-Level Instrument In-Clinic Trial Use, 145
Ear-Level Instrument Trial Use Guide, 75, 143
Epworth Sleepiness Scale, 141
Hearing Aid Special Considerations, 115
Hospital Anxiety and Depression Scale (HADS), 137–138
Louderness Discomfort Levels—Clinical Guide, 123
Noise Generator In-Clinic Trial Use, 149
Primary Care PTSD Screening Tool (PC-PTSD), 139
PTM Flowchart, 95
Relief Scale, 127–128
Sound Plan Worksheet, 125–126
Sound Tolerance Interview, 117–119
Sound Tolerance Worksheet, 121–122
Tinnitus and Hearing Survey, 101
Tinnitus Contrast Activity, 62, 131–132
Tinnitus Handicap Inventory, 105–106
Tinnitus Handicap Inventory: Screening Version, 107
Tinnitus Interview: Interdisciplinary Evaluation, 133–136
Tinnitus Problem Checklist, 111
Tinnitus Triage Guidelines, 97
What to Do When Everyday Sounds Are Too Loud (without hearing aids), 103–104
Foundational research
  assessment protocol development, 15
  and ATM (audiologic tinnitus management), 14
  and clinical trial candidacy, 12–13
  educational component need, 14
  efficacy: TM versus TRT, 12–13
  efficacy: TM versus TRT, veterans, 14–15
  group intervention, 13–14
  and multidisciplinary team, 17–18
  overview, 12, 19
  paths can differ for management, 12
  and psychological concerns, 17–18
  and self-help workbook (PTM), 14, 17, 18
  sound attention diversion, 14
  studies
    first, 12–13
    second, 13–14
    third, 14–15
    fourth, 15–17
    fifth, 17–18
  TBI: veterans, 17–18
  and telephone-based administration, 17
  and therapeutic sound, 14, 18
  veterans, 14–18

G

Glucocorticoids, 36
Group Education
  first session, 59–63
  second session, 63
  attention diversion, 65
  Attention Scale, 61, 129–130
  audiologist-conducted workshops
    and Attention Scale, 61
  background sound type taught, 61
  demonstration of sound types, 61–62
individualized sound plan development, 59
interesting sound type taught, 60–61
and Relief Scale, 61
soothing sound type taught, 60
Sound Plan Worksheet, 57, 59, 60, 62, 64
sound types taught, 60–61
THS (Tinnitus and Hearing Survey) review, 59–60, 101
Tinnitus Contrast Activity, 62
candidacy, 40
CBT (cognitive-behavioral therapy)
  essential components, 64
  overview, 63–64
  Session 1, 64–65
  Session 2, 65–66
  Session 3, 66
Changing Thoughts and Feelings Worksheet, 64
cognitive restructuring, 65–66
collaborative self-management, 58, 66
continuity with Interdisciplinary Evaluation, 76
follow-up, 66
  overview, 28–29, 66
patient self-help workbook, 58
pleasant activities for diversion, 65
psychologist-conducted workshops
  overview, 63–66
relaxation techniques, 65, 151
Relief Scale, 61
sound grid use, 62
stress reduction, 64–65
therapeutic sound use education, 58–59
Tinnitus Contrast Activity, 131–132
Tinnitus Problem Checklist, 60–62, 64, 66

HHIE-S (Hearing Handicap Inventory for the Elderly-Screening), 42, 109
Hospital Anxiety and Depression Scale (HADS), 69, 137–138
How to Manage Your Tinnitus (J.A. Henry et al.), 27–28, 40, 45, 48, 58, 78. See also Patient self-help workbook main entry
Hyperacusis, 33. See also Loudness recruitment; Misophonia; Phonophobia; Sound Tolerance Interview (STI); STEM (sound tolerance evaluation and management)
defined, 9
Loudness Discomfort Levels—Clinical Guide, 123 screening for, 27, 28
Sound Tolerance Interview form, 117–119
sound tolerance management approach, 40
Sound Tolerance Worksheet, 52, 121–122
therapy for, 10, 37, 52, 82–83
What to Do When Everyday Sounds Are Too Loud (without hearing aids), 40, 41, 52, 103–104
Hypersensitivity to sound. See Hyperacusis

I

Idiopathic sudden sensorineural hearing loss (ISSHL), 36, 37
Individualized Support
  appointments’ process, 77–79
  audiologist standard protocol, 77–79
  augmentative sound, 80
  CBT (cognitive-behavioral therapy), 80–81, 82
  counseling, 79–80
  criteria for progress from Interdisciplinary Evaluation, 76
  extending intervention, 79
  NTT (neuromonics tinnitus treatment) extended support, 83
  overview, 77, 83–84
  patient self-help workbook, 79
  personal listening devices, 80
  Sound Plan Worksheet, 77, 79
  stationary sound devices, 80
  telephone counseling, 79
  THS (Tinnitus and Hearing Survey), 77–78, 101
  Tinnitus Handicap Inventory (THI), 77–78
  Tinnitus Interview: Interdisciplinary Evaluation, 78
  TM (tinnitus masking) extended support, 82
  TRT (tinnitus retraining therapy) extended support, 82–83
Individualized support overview, 30–31

H

Hallucinations (auditory/musical), 4–5
Hallucinogen abuse, 47
Health literacy, 26
Hearing aids
  needed for PTM, 45–46
  and tinnitus, 46–47
  tinnitus management reaction, 46
Hearing Aid Special Considerations, 46, 115
Hearing Handicap Inventory for the Elderly-Screening (HHIE-S), 42, 109
Hearing loss, 7
  case study, 32
  idiopathic sudden sensorineural hearing loss (ISSHL), 36, 37
  sensorineural, 41
Insomnia, 47, 48, 69, 70
Interdisciplinary Evaluation
   anxiety screening, 69
   BTE (behind-the-ear) instrument in-clinic trials, 75–76
Combination Instrument In-Clinic Trial Use, 75, 147
   continuity with Group Education, 76
criteria for progress to Individualized Support, 76
depression screening, 69
Ear-Level Instrument Assessment/Fitting
   Flowchart, 70, 74, 113
ear-level instrument follow-up, 76
Ear-Level Instrument In-Clinic Trial Use, 74–76, 145
Ear-Level Instrument Trial Use Guide, 75, 143
   forms for in-clinic ear-level trials, 75
Hospital Anxiety and Depression Scale (HADS), 69, 137–138
   interview administration, 70–72
Noise Generator In-Clinic Trial Use, 75, 149
   noise generators for in-clinic trials, 75
nonmental health clinician screening, 68–69
   overview, 29–30, 67
PC-PTSD (Primary Care PTSD) screening tool, 69
   psychoacoustic assessment, 72–73
PTSD (posttraumatic stress disorder), 69
   sleep disorders, 69–70
Sound Plan Worksheet, 72, 76
THS (Tinnitus and Hearing Survey), 70, 74, 101
   Tinnitus Handicap Inventory (THI), 70, 105–106, 107
   Tinnitus Interview, 67, 70, 74, 78, 133–136
Intervention
   Group Education overview, 26–27 (See also Education main entry; Group Education main entry)
ISSHL (idiopathic sudden sensorineural hearing loss), 36, 37
   Loudness Discomfort Levels—clinical guide, 123
   Loudness discomfort levels (LDL), 10, 52–53
   Loudness recruitment. See also Hyperacusis
   defined, 9–10, 54
treatment, 10
M
Managing Your Tinnitus, 59, 80, 151–152
Managing Your Tinnitus (DVD/CD), 151–152
Marijuana use, 47
Masking. See TM (tinnitus masking)
Masking as term, 60. See also TM (tinnitus masking)
Medications
   aminoglycoside antibiotics, 5
   amitryptiline, 48
   antibiotics, 5
   antidepressants, 48
   anxiolitic, 48
   aspirin, 5, 48
   chemotherapy, 5, 48
   cisplatin, 5
   corticosteroids, 36
   diuretics, 5, 48
   glucocorticoids, 36
   loop diuretics, 5, 48
   lorazepam, 48
   NSAIDs (nonsteroidal antiinflammatory drugs), 5, 48
   quinine, 5, 48
Mental health professionals
   referral to, 47
   on team, 24–25
   triage to, 24–25
Misophonia. See also Hyperacusis
   in case history, 33
   defined, 9, 54
   and evaluation, 28
   treatment, 10
N
Narcolepsy, 69, 70
NCRAR (National Center for Rehabilitative Auditory Research), 19, 22
Neuro-otologology, 24
Noise Generator In-Clinic Trial Use, 75, 149
Nonpulsatile tinnitus, 2, 43, 44
Nonsteroidal antiinflammatory drugs (NSAIDs), 5
NSAIDs (nonsteroidal antiinflammatory drugs), 5, 48
NTT (neuromonics tinnitus treatment), 83
index

O

Obsessive-compulsive disorder, 47
Opiate abuse, 47
Otolaryngology, 24
  referral to criteria, 43–44
  triage to, 36, 37
Ototoxicity, 48

P

Panic episodes, 47
Pathophysiology of tinnitus, 7–8
Patient clinical data (tinnitus), 8–9
Patient examples. See Case studies/patient examples
Patient self-help workbook
  Group Education, 58
  Individualized Support, 79
  overview, 27–28
  timing of distribution, 48–49
PC-PTSD (Primary Care PTSD) screening tool.
  See Primary Care PTSD Screening Tool (PC-PTSD)
Phobias, 47
Phonophobia. See also Hyperacusis; Sound Tolerance Interview (STI); STEM (sound tolerance evaluation and management)
in case study, 33
defined, 9
and LDL, 53
Loudness Discomfort Levels—Clinical Guide, 123
Sound Tolerance Interview form, 117–119
Sound Tolerance Worksheet, 52, 121–122
treatment, 10
What to Do When Everyday Sounds Are Too Loud (without hearing aids), 40, 41, 52, 103–104
Prevalence of tinnitus, 6
Primary Care PTSD Screening Tool (PC-PTSD), 69, 139
Prosthetics, 25
Psychotic disorders, 47
PTM (progressive tinnitus management)
  assessment as starting point, 26 (See also
    Audiologic Evaluation main entry;
    Interdisciplinary Evaluation main entry; Triage main entry)
audiologists on team, 24
  basic premises, 21–26
  and CBT (cognitive-behavioral therapy (See CBT (cognitive-behavioral therapy) main entry)
clinical service progressivity, 22–23
collaborative self-management, 26, 58, 66
efficiency of, 22
five levels of, 22, 23
flowchart, 26, 36, 41, 52, 95
foundational research, 11–19 (See also
  Foundational research main entry for details)
and hearing needed for participation, 45–46
hierarchical approach, 22, 23
interdisciplinary approach, 24–25
intervention (See Intervention main entry)
levels’ overview, 26–30 (See also Triage,
  Audiologic Evaluation, Group Education,
  Interdisciplinary Evaluation, Individualized Support main entries for details)
mental health professionals on team, 24–25
neuro-otologists on team, 24
otolaryngologists on team, 24
overview, 21–34, 31–32
and prosthetics, 25 (See also Prosthetics main entry)
PTSD (posttraumatic stress disorder), 24, 47 (See also PTSD (posttraumatic stress disorder) main entry)
reaction to tinnitus management, 21–22
sleep disturbances, 25–26 (See also Sleep disturbances main entry)
sound tolerance management approach, 40
PTSD (posttraumatic stress disorder), 24
case study, 33
and psychologist group sessions, 63
referral for, 47
screening, 69
Pulsatile tinnitus
Audiologic Evaluation, 43–44
causes, 44
clinical presentation, 43
defined, 2, 44
differential diagnosis, 24
site of, 24
and surgery, 44
and triage, 37

Q

Quinine, 5, 48

R

Relaxation techniques, 65, 151
Relief Scale, 61, 127–128
REM behavior disorders, 69
Sedative abuse, 47
Self-help workbook. See Patient self-help workbook main entry
Sensorineural tinnitus and noise exposure, 7
origin of, 3
as phantom auditory perception, 3
Sleep apnea, 47, 48, 69
Sleep disorders, 25–26
management of, 48
referral for, 47–48
screening, 69–70
Sleepiness Scale, Epworth, 69, 141
Somatosound
Audiologic Evaluation, 43–44
overview, 2–3
and triage, 37
Sound hypersensitivity. See Hyperacusis
Sound Plan Worksheet, 57, 59, 60, 62, 64, 72, 76, 77, 79, 125–126
Sound Tolerance Interview form, 117–119
Sound Tolerance Interview (STI), 52, 53, 117–119. See also STEM (sound tolerance evaluation and management)
Sound Tolerance Worksheet, 52, 121–122
STEM (sound tolerance evaluation and management), 40. See also Hyperacusis; Phonophobia
described, 51–52
ear-level instrument trial use, 53–54
hyperacusis/allied conditions’ definitions, 54
overview, 28, 51, 54–55
Sound Tolerance Interview (STI), 52, 53, 117–119
STI (Sound Tolerance Interview). See also Hyperacusis; Phonophobia; Sound Tolerance Interview (STI)
Stria vascularis ion transport problems, 36
Substance abuse, 47

Tinnitus. See also Chronic tinnitus
amplification benefits, 46–47
associated auditory pathologies, 6, 7
criterion, 2
delayed-onset, 6
hallucinations (auditory/musical), 4–5
and hearing loss degree, 7
neurological origin, 2
neurophysiologic, 3 (See also Sensorineural tinnitus main entry)
nonpulsatile, 2 (See also under Tinnitus main entry)
ojective, 3
onset, 5–6, 8
pathophysiology, 7–8
permanent versus temporary, 5
and prescription medication, 48 (See also Medications main entry)
pulsatile, 2 (See also under Tinnitus main entry)
recent-onset, 5–6
risk factors, 6–7
sensorineural overview, 3 (See also Sensorineural tinnitus main entry)
somatic, 2–3
somatically modulated, 44
somatic versus neurophysiologic origin, 2
somatosound, 2–3 (See also Nonpulsatile tinnitus; Pulsatile tinnitus; Somatosounds; Tinnitus main entry)
overview, 2–3 (See also Somatosound main entry)
symptoms, 2
types, 2
sound types, patient reports, 8–9
subjective, 4
subjective versus objective, 3–4
temporary versus permanent, 5
Tinnitus and Hearing Survey, 101
Tinnitus Contrast Activity, 62, 131–132
Tinnitus Handicap Inventory, 105–106
Tinnitus Handicap Inventory: Screening Version, 107
Tinnitus Interview: Interdisciplinary Evaluation, 67, 70, 74, 78
tinnitus neural signal defined, 2
Tinnitus Problem Checklist, 44–45, 60–62, 64, 66, 111
triage guidelines, 35–36, 37, 97 (See also Tinnitus Triage Guidelines under main entry Forms)
video Web site, 49
versus THI (Tinnitus Handicap Inventory), 4
INDEX 159

Tinnitus Contrast Activity, 62, 131–132
Tinnitus Handicap Inventory (THI), 41–42, 70,
77–78, 79, 105–106, 107. See also Audiologic
Evaluation; Individualized Support;
Interdisciplinary Evaluation
Tinnitus Interview: Interdisciplinary Evaluation,
133–136
Tinnitus masking (TM). See TM (tinnitus masking)
Tinnitus Problem Checklist. See also Audiologic
Evaluation
TM (tinnitus masking)
  Individualized Support extended support, 82
  overview, 82
  in PTM, 12
  research, 12, 14
TMJ (temporomandibular joint), 2, 43
Transient ear noise defined, 1–2
Traumatic brain injury (TBI), 16–17
Triage
  to audiology, 37
  guidelines, 35–36, 37 (See also Tinnitus Triage
  Guidelines under main entry Forms)
to mental health, 36–37
to otolaryngology, 36, 37
overview, 27, 35, 37–38
to urgent care, 36
TRT (tinnitus retraining therapy)
  Individualized Support extended support, 82–83
  overview, 82–83
  in PTM, 12, 61
  research, 12, 14

V
Vascular disruption, 36
Veteran research, 14–18. See also Primary Care
  PTSD Screening Tool (PC-PTSD); PTSD
  (posttraumatic stress disorder)

W
What to Do When Everyday Sounds Are Too Loud
  (without hearing aids), 40, 41, 52, 103–104
  Workbook. See Patient self-help workbook main entry