

BackTrack User Manual

Contents

BackTrack - Multi-Practice Management System	2
Overview	2
Key Features	2
Quick Start	3
First-Time Setup (Fresh Installation)	3
Setting Up a Second Computer (Existing Database)	3
Core Features	3
Patient Management	3
Appointments	3
Medical Billing (NEW in v1.0)	3
Clinical Notes	4
Clinical Assessment Tools (Chiropractic & Physical Therapy)	4
Vitals Tracking (All Practice Types)	5
Reports	5
Database Synchronization	5
Security Features	6
Encryption	6
Access Control	6
Audit Logging	7
Password Recovery	7
Installation	7
macOS	7
Windows	7
Linux	7
Data Storage	8
Directory Structure	8
Configuration File (<code>./data/config.json</code>)	8
Medical Billing Setup	8
Initial Configuration	8
Seeding Medical Codes	8
Workflow	8
Tips & Best Practices	9
Security	9
Performance	9
Sync (Multi-Computer)	9
Billing	9

Troubleshooting	10
Can't Log In	10
Sync Issues	10
Billing	10
Performance	10
Support & Documentation	10
Documentation Files	10
In-App Support	10
System Requirements	11
Minimum	11
Recommended	11
Privacy & Compliance	11
License & Copyright	11
Version History	12
Version 1.0.0 (January 2026)	12
Version 0.8.x (2025)	12
Version 0.7.x (2024)	12
Version 0.1.x - 0.6.x (2024)	12
Contact & Support	12

BackTrack - Multi-Practice Management System

Version 1.0.0 | Secure, Cross-Platform Practice Management

Overview

BackTrack is a comprehensive practice management system designed for healthcare practices including Chiropractic, Physical Therapy, Veterinary, and other specialties. It provides secure patient/client management, appointment scheduling, clinical documentation, medical billing with EDI support, and multi-user collaboration with built-in database synchronization.

Key Features

- **Secure & Encrypted** - AES-256-GCM database encryption, Argon2id password hashing
- **Multi-User Support** - Role-based access (Admin, Doctor, Staff) with MFA
- **Patient/Client Management** - Complete records, insurance tracking, clinical history, vitals tracking
- **Appointment Scheduling** - Calendar view, automated reminders (SMS/Email)
- **Clinical Notes** - SOAP format, searchable, audit trail
- **Medical Billing** - ICD-10, CPT/CDT codes, 837 EDI claims export, payment tracking
- **Clinical Tools** - ROM tracking, Pain assessment, Treatment plans, Vitals visualization
- **Reports & Analytics** - Patient statistics, billing summaries, month-end review
- **Database Sync** - Secure peer-to-peer sync for multi-location practices
- **Web Check-In & Onboarding** - QR code and SMS-based patient onboarding
- **Modern UI** - Light/Dark themes, responsive design

Quick Start

First-Time Setup (Fresh Installation)

1. **Launch the Application**
2. **Click “Initial Setup”**
3. **Set Database Password** - This encrypts all patient data (save it securely!)
4. **Create First Admin User**
5. **Save Your Support Code** - Required for password recovery
6. **Configure Practice Information** - Location name, contact details

Setting Up a Second Computer (Existing Database)

See [NEW_COMPUTER_SETUP.md](#) for detailed instructions on: - Copying your existing database to a new computer - Setting up automatic sync between computers - Troubleshooting connection issues

Core Features

Patient Management

- **Complete Patient Records** - Demographics, contact info, emergency contacts
- **Medical History** - Allergies, medications, conditions
- **Insurance Information** - Provider details, subscriber relationships (self/spouse/parent/child)
- **Patient IDs** - 4-digit unique identifiers
- **Archive System** - Soft-delete for inactive patients
- **Search & Filter** - Quick patient lookup

Appointments

- **Calendar View** - Daily, weekly, monthly scheduling
- **Multiple Doctors** - Support for multi-doctor practices
- **Status Tracking** - Scheduled, Completed, Cancelled, No-Show
- **Reminders** - Automated SMS/Email reminders
- **Check-In System** - QR code web-based patient check-in
- **Export to Calendar** - ICS file generation for Outlook/Google Calendar

Medical Billing (NEW in v1.0)

ICD-10 Diagnosis Codes

- Pre-seeded common chiropractic diagnoses (M54., M99., S13.*, etc.)
- Searchable database of thousands of codes
- Multiple diagnoses per appointment
- Custom code management

- Primary diagnosis designation

CPT Procedure Codes

- Pre-seeded chiropractic procedures (98940-98943, 97110, 97140, etc.)
- Procedure quantities and fees
- Link procedures to billing charges
- Custom procedure codes

837 EDI Claims Export

- HIPAA-compliant 837P format
- Validation before export
- Practice NPI and Tax ID configuration
- Clearinghouse integration
- Batch export by date range
- Error detection and patient edit shortcuts

Payment Tracking

- Payment status (Paid, Partially Paid, Unpaid, Insurance Pending, Waived)
- Payment amounts and notes
- Outstanding balance calculations
- Month-end billing summaries

Month-End Review (NEW)

- Review incomplete appointments for billing period
- Quick status updates (mark completed, cancelled, no-show)
- Filter by status and date range
- Real-time statistics (unpaid count, scheduled past-due)
- Direct access to 837 export
- Visual appointment list with payment indicators

Clinical Notes

- **SOAP Format** - Subjective, Objective, Assessment, Plan
- **Template System** - Quick note templates
- **Search Capabilities** - Find notes by patient or date
- **Secure Storage** - Encrypted with full audit trail
- **Print/Export** - Generate clinical reports

Clinical Assessment Tools (Chiropractic & Physical Therapy)

Range of Motion (ROM) Tracking

- Cervical, thoracic, and lumbar spine measurements
- Bilateral joint measurements (shoulders, hips, knees, ankles)
- Baseline and progress tracking with goal setting

- Pain level during movement assessment
- Visual progress charts

Pain Assessment

- 0-10 pain scale with visual slider
- Multiple body location tracking
- Pain type, frequency, triggers, and relief factors
- Trend visualization over time
- Historical comparison

Treatment Plans

- Structured treatment plan creation
- Short-term and long-term goals
- Visit frequency and estimated duration
- Treatment types and home exercises
- Plan status tracking (active/completed/discontinued)

Vitals Tracking (All Practice Types)

- Weight, blood pressure, temperature
- Heart rate, respiratory rate, oxygen saturation
- Graphical trend visualization
- Historical data with date/time stamps
- Quick visual assessment of patient status

Reports

- **Patient Demographics** - Age distribution, gender breakdown
- **Appointment Statistics** - Volume trends, completion rates
- **Billing Reports** - Revenue analysis, outstanding balances
- **Custom Date Ranges** - Flexible reporting periods
- **Export Options** - CSV for further analysis

Database Synchronization

NEW: Conflict Detection & Status Notifications

Setup

1. Enable sync in Settings Database Sync
2. Configure peer address (e.g., 192.168.1.100:8090)
3. Set sync password (shared secret)
4. Set sync interval (5-60 minutes)
5. Click “Manual Sync Now” to test

Status Indicator Located in the top-right header: - **Green** = Syncing successfully (shows last sync time) - **Yellow** = Configured but peer offline/waiting - **Red** = Sync errors detected - **Gray** = Sync disabled in settings

Conflict Detection

- Automatic conflict detection before every sync
- SHA256 checksums ensure data integrity
- Prevents overwriting newer local changes
- Creates automatic backups before sync
- Clear error messages if conflicts detected

How It Works

1. Computer A acts as “sync server” (peer)
2. Computer B connects to A and requests database
3. System checks if remote is newer than local
4. If safe, downloads and replaces local database
5. Automatic backup created before replacement
6. All communication encrypted with sync password

Security Features

Encryption

Application-Level: - **Database:** AES-256-GCM encryption at rest - **Passwords:** Argon2id hashing (memory-hard, GPU-resistant) - **Sync:** Encrypted data transfer with password-derived keys - **MFA:** TOTP-based two-factor authentication (optional)

System-Level (STRONGLY RECOMMENDED): - **Full Disk Encryption:** FileVault (macOS), BitLocker (Windows), LUKS (Linux) - **HIPAA Compliance:** Disk encryption required for “encryption at rest” - **Status Detection:** BackTrack checks and warns if encryption is not enabled - **Setup Guide:** See `USER_SECURITY_GUIDE.md` for detailed instructions and best practices

IMPORTANT FOR HIPAA COMPLIANCE:

While BackTrack encrypts the database file, **full disk encryption is strongly recommended** to protect: - Database backups - Log files - Temporary files - System memory dumps

BackTrack will check your encryption status on startup and in Settings. Enable disk encryption before storing patient data!

Access Control

- **Admin:** Full system access, user management, billing configuration
- **Doctor:** Patient care, clinical notes, prescriptions
- **Staff:** Scheduling, patient demographics, basic billing

Audit Logging

- All database changes logged
- User attribution for compliance
- Searchable audit trail
- Cannot be edited or deleted

Password Recovery

- Unique support code generated at setup
- Allows password reset without data loss
- Support code required for recovery

Installation

macOS

```
# Open the .app bundle
open KranyakBearBacktrack.app

# Or install .pkg for system-wide installation
sudo installer -pkg BackTrack-1.0.0.pkg -target /
```

Windows

```
# Run the installer
BackTrack-Setup-1.0.0.exe

# Or run portable version
BackTrack-1.0.0-Windows-amd64\backtrack.exe
```

Linux

```
# Debian/Ubuntu (.deb)
sudo dpkg -i backtrack_1.0.0_amd64.deb
# or for ARM64
sudo dpkg -i backtrack_1.0.0_arm64.deb

# RedHat/Fedora (.rpm)
sudo rpm -i backtrack-1.0.0.x86_64.rpm
# or for ARM64
sudo rpm -i backtrack-1.0.0.aarch64.rpm

# Then run
backtrack
```

Data Storage

Directory Structure

```
Application Directory/
  data/                      # Main data directory
    backtrack.db              # Encrypted SQLite database
    backtrack.db.backup.*     # Automatic backups
    config.json               # Application configuration
  Logs/                      # Application logs
    backtrack_YYYY-MM-DD.log # Daily rotating logs (7-day retention)
  Backups/                   # Manual backups (if enabled)
    backup_YYYYMMDD_HHMMSS.db
  Reports/                   # Generated reports
    report_YYYYMMDD_HHMMSS.csv
```

Configuration File (./data/config.json)

- Practice information (name, NPI, Tax ID)
- Sync settings (peer address, interval, password - encrypted)
- Email/SMS settings for reminders
- Billing settings (clearinghouse ID, default payer)
- **Permissions:** 0600 (read/write owner only)

Medical Billing Setup

Initial Configuration

1. **Go to Settings** **Practice Contact Info**
2. **Enter Required Information:**
 - Practice NPI (National Provider Identifier)
 - Practice Tax ID (EIN)
 - Clearinghouse ID (from your clearinghouse)
 - Default Payer ID (primary insurance processor)

Seeding Medical Codes

Automatic Seeding (Recommended) On first login, the system automatically seeds: - **38 common ICD-10 codes** for chiropractic care - **7 common CPT codes** for adjustments and therapies

Manual Code Management

- **Settings** **Manage ICD-10 Codes** - Add custom diagnoses
- **Settings** **Manage CPT Codes** - Add custom procedures

Workflow

1. **Schedule Appointment** with patient

2. **Mark Appointment as Completed** (or use “Checkout” button)
3. **Add ICD-10 Diagnoses** (e.g., M54.5 - Low back pain)
4. **Add CPT Procedures** (e.g., 98941 - Spinal manipulation, 3-4 regions)
5. **Enter Billing Information** (fee, payment status)
6. **Month-End Review** - Check for incomplete billing
7. **Export 837 Claims** - Generate EDI file for clearinghouse

Tips & Best Practices

Security

- **ENABLE DISK ENCRYPTION FIRST** - FileVault (Mac), BitLocker (Windows), LUKS (Linux)
 - See `USER_SECURITY_GUIDE.md` for step-by-step instructions and best practices
 - Required for HIPAA compliance
 - Protects all data if computer is stolen or accessed
- Use a **strong database password** (12+ characters, mixed case, numbers, symbols)
- **Enable MFA** for all users (especially admins)
- **Save your support code** in a secure location (password manager)
- **Regular backups** - Database file is in `./data/backtrack.db`
- Keep sync passwords different from database passwords
- **Check encryption status** in Settings Disk Encryption section

Performance

- Archive old patients to keep active list manageable
- Run month-end review to keep appointment list clean
- Close completed appointments promptly for accurate billing

Sync (Multi-Computer)

- Sync interval of **15-30 minutes** is ideal for small practices
- Always verify sync status indicator (green = working)
- If both computers need to make changes, designate one as “primary” for final review
- Review sync logs if red indicator appears
- Manual sync available anytime (Settings Manual Sync Now)

Billing

- Add ICD/CPT codes to appointments **before marking completed**
- Use “Copy from Previous” to speed up repetitive diagnoses
- Run **Month-End Review** before generating 837 claims
- Verify patient insurance info is complete before EDI export
- Check 837 preview for errors before submitting to clearinghouse

Troubleshooting

Can't Log In

- **Forgot database password?** Use "Password Recovery" with support code
- **MFA code not working?** Check device time sync, try backup code
- **Database locked?** Another instance may be running, close and retry

Sync Issues

- **Peer unavailable?** Check network connectivity, firewall settings
- **Conflict detected?** Review which computer has newer data, use manual sync
- **Sync failing?** Verify sync passwords match on both computers
- **Status stays yellow?** Peer computer may be offline or firewall blocking port

Billing

- **837 export shows errors?** Click patient name to edit missing insurance info
- **ICD/CPT not showing?** Ensure codes are seeded (Settings Manage Codes)
- **Month-end review empty?** Check date range and status filter

Performance

- **Slow loading?** Archive old patients, close unused appointments
- **Database growing large?** Review old backups in ./data/ directory

Support & Documentation

Documentation Files

- **README.md** (this file) - Complete feature overview and setup guide
- **QUICKSTART.md** - Fast setup for new installations
- **NEW_COMPUTER_SETUP.md** - Multi-computer sync setup guide
- **USER_SECURITY_GUIDE.md** - Security best practices and configuration
- **MFA_GUIDE.md** - Two-factor authentication setup
- **PASSWORD_RECOVERY.md** - Database password recovery procedures
- **TROUBLESHOOTING.md** - Common issues and solutions
- **LICENSING.md** - Licensing model, types, and management guide
- **LICENSE** - Software license and terms

In-App Support

- **Help Menu** - Quick reference guide
- **About Dialog** - Version info, credits
- **Log Files** - ./Logs/ directory for troubleshooting

System Requirements

Minimum

- **OS:** macOS 11+, Windows 10+, Linux (Ubuntu 20.04+, Fedora 35+)
- **Graphics:** OpenGL 2.0+ support (required for GUI)
- **RAM:** 4GB
- **Disk:** 500MB + data storage
- **Display:** 1280x720

Recommended

- **OS:** macOS 13+, Windows 11, Ubuntu 22.04+
- **Graphics:** OpenGL 3.0+ or higher
- **RAM:** 8GB+
- **Disk:** 2GB (with regular backups)
- **Display:** 1920x1080 or higher
- **Network:** For sync - Same local network or VPN

Note: A compatibility test utility is available on the download page to verify OpenGL support before installation.

Privacy & Compliance

- **HIPAA Consideration:**
 - Application-level encryption (database, sync in transit)
 - Audit logging and access controls
 - **System-level encryption REQUIRED** (enable FileVault/BitLocker/LUKS)
 - Encryption status monitoring in Settings
- **Data Residency:** All data stored locally on your computers
- **No Cloud Services:** No third-party data sharing
- **Offline Capable:** Works without internet connection

HIPAA Compliance Checklist: 1. Enable **full disk encryption** on all computers (see `USER_SECURITY_GUIDE.md`) 2. Use strong database passwords 3. Enable MFA for all users 4. Regular backups to encrypted drives 5. Physical security (locked offices, screen locks) 6. User training on HIPAA requirements 7. Document security measures for audits 8. Business Associate Agreements (BAAs) with service providers

Note: While BackTrack implements security best practices, **you are responsible for overall HIPAA compliance.** BackTrack provides the tools, but compliance requires proper configuration, physical security, user training, and organizational policies.

License & Copyright

Copyright © 2025-2026 Allan Marillier

This software is proprietary and licensed under a custom license agreement. All rights reserved.
See the [LICENSE](#) file for complete terms, conditions, and our Ethical Data Access Guarantee.

Version History

Version 1.0.0 (January 2026)

- **Medical Billing System:** ICD-10, CPT/CDT codes, 837 EDI export with error detection
- **Clinical Tools:** ROM tracking, Pain assessment, Treatment plans
- **Vitals Tracking:** Graphical visualization, trend analysis
- **Patient Onboarding:** SMS and QR code-based onboarding workflows
- **Month-End Review:** Streamlined billing workflow
- **Enhanced Sync:** Conflict detection, status notifications, delta sync
- **Multi-Practice Support:** Chiropractic, Physical Therapy, Veterinary, and more
- **Security Enhancements:** `USER_SECURITY_GUIDE.md`, improved documentation

Version 0.8.x (2025)

- Database synchronization between computers
- Automated appointment reminders (SMS/Email)
- Web-based patient check-in system
- Multi-doctor support

Version 0.7.x (2024)

- Multi-user support with role-based access
- Two-factor authentication (MFA)
- Clinical notes with SOAP format
- Audit logging

Version 0.1.x - 0.6.x (2024)

- Initial release
- Patient management
- Appointment scheduling
- Basic reporting

Contact & Support

Developer: Allan Marillier

Application: BackTrack Multi-Practice Management System

Version: 1.0.0

Website: <https://krankybearbacktrack.duckdns.org>

Support Email: support@krankybearbacktrack.com

For technical support, please include: - Your operating system and version - BackTrack version (see Help □ About) - Description of the issue - Log files from ./Logs/ directory (if applicable)

□ **Built with Go & Fyne | Secure • Modern • Reliable**