

# ENNU Legacy Data Import and Ongoing Synchronization Strategy

**Document Version:** 1.0

**Date:** June 20, 2025

**Purpose:** Complete mapping of legacy system data to HubSpot destinations with ongoing sync specifications

**Classification:** Technical Implementation Guide

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## Executive Summary

This document provides the definitive mapping of all ENNU legacy system data to HubSpot destinations, including detailed field-by-field import specifications and ongoing synchronization strategies. The architecture ensures 100% data preservation while establishing efficient, real-time synchronization between all systems.

**Key Legacy Systems:** - **OM Aggregation Database** - 165 fields, 16M+ patient records - **WooCommerce E-commerce** - Products, orders, customers, subscriptions - **Open Medical (OM)** - Clinical data, appointments, treatments - **Open Dental (OD)** - Dental services, scheduling, billing - **Legacy CRM** - Marketing data, lead sources, campaigns

**Target HubSpot Architecture:** - **7 Standard Objects** enhanced with custom fields - **3 Custom Objects** for specialized medical data - **Bidirectional synchronization** with real-time and batch processing - **Complete audit trails** and conflict resolution

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## 1. OM Aggregation Database Import Mapping

### 1.1 Patient Demographics and Contact Information (15 Fields)

**Source:** OM Aggregation Database

**Destination:** HubSpot Contacts Object

**Import Method:** Initial bulk import + ongoing sync every 5 minutes

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Notes
PatNum	open_medical_patient_id	Number	Critical	Primary OM identifier
AggregationKeyID	aggregation_key_id	Single-line text	Critical	Unique aggregation key
FName	firstname	Single-line text	Critical	Standard HubSpot field
LName	lastname	Single-line text	Critical	Standard HubSpot field
Email	email	Email	Critical	Standard HubSpot field
HmPhone	phone	Phone number	Critical	Standard HubSpot field
WirelessPhone	mobilephone	Phone number	Critical	Standard HubSpot field
WkPhone	work_phone	Phone number	Medium	Custom field
Address	address	Multi-line text	High	Standard HubSpot field
Address2	address_2	Single-line text	Medium	Custom field
City	city	Single-line text	High	Standard HubSpot field

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Notes
State	state	Dropdown	Critical	Standard HubSpot field
Zip	zip	Single-line text	High	Standard HubSpot field
Birthdate	date_of_birth	Date	High	Custom field
Gender	gender	Dropdown	High	Standard HubSpot field

**Ongoing Sync:** Bidirectional every 5 minutes

**Conflict Resolution:** OM Aggregation is master for clinical data, HubSpot is master for contact preferences

## 1.2 Patient Status and Lifecycle (8 Fields)

**Source:** OM Aggregation Database

**Destination:** HubSpot Contacts Object

**Import Method:** Initial bulk import + real-time sync

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Sync Frequency
StatusOM	patient_status_om	Dropdown	Critical	Real-time
SubStatusOM	sub_status_om	Dropdown	High	Real-time
PatStatus	patient_status_od	Dropdown	Medium	15 minutes
CRMtoOMSsync	crm_to_om_sync	Checkbox	High	Real-time
PatCreationDate	patient_creation_date	Date	High	One-time import
DateFirstVisit	first_visit_date	Date	High	15 minutes

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Sync Frequency
LCAppointment	last_appointment_date	Date & time	Critical	Real-time
CRMUserDeleted	crm_user_deleted	Checkbox	Low	Daily

**Status Mapping:** - StatusOM values: Lead, Prospect, Opportunity, Current, Former, Promotional - Maps to HubSpot Lifecycle Stages: Lead, Marketing Qualified Lead, Sales Qualified Lead, Customer, Evangelist

### 1.3 Financial Information (8 Fields)

**Source:** OM Aggregation Database

**Destination:** HubSpot Contacts Object

**Import Method:** Initial bulk import + sync every 15 minutes

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Business Logic
BalTotal	account_balance	Number	Critical	Triggers billing workflows
EstBalance	estimated_balance	Number	High	Used for financial planning
Bal_0_30	balance_0_30	Number	High	Collections automation
Bal_31_60	balance_31_60	Number	High	Collections automation
Bal_61_90	balance_61_90	Number	High	Collections automation
BalOver90	balance_over_90	Number	High	Collections automation
PayPlanDue	payment_plan_due	Number	High	Payment plan automation

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Business Logic
FeeSched	fee_schedule	Dropdown	Medium	Pricing tier management

**Automation Triggers:** - Balance > \$500: Create high-priority ticket for collections - Payment plan due: Automated payment reminder emails - Overdue > 90 days: Escalate to collections workflow

## 1.4 Current Health Metrics (24 Fields)

**Source:** OM Aggregation Database

**Destination:** HubSpot Contacts Object (current values) + Measurement History Custom Object (historical data)

**Import Method:** Current values to Contacts, historical data to Measurement History

### Current Values → Contacts Object

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Update Frequency
weight_mr	current_weight	Number	High	Real-time
bmi_mr	current_bmi	Number	High	Real-time
waist_mr	current_waist	Number	High	Real-time
neck_mr	current_neck	Number	Medium	Real-time
bodyfat_mr	current_body_fat	Number	Medium	Real-time
weight_mr_date	last_measurement_date	Date	High	Real-time
weight_best	best_weight_achieved	Number	Medium	When improved
bmi_best	best_bmi_achieved	Number	Medium	When improved
waist_best	best_waist_achieved	Number	Medium	When improved

## Historical Data → Measurement History Custom Object

All measurement fields with date stamps create individual Measurement History records:

Measurement Type	OM Fields	HubSpot Custom Object Fields
Weight Tracking	weight_mr, weight_mr_date, weight_best, weight_goal	measurement_type: "Weight", measurement_value, measurement_date, reference_range_low, reference_range_high
BMI Tracking	bmi_mr, bmi_best, bmi_goal	measurement_type: "BMI", measurement_value, measurement_date
Body Composition	bodyfat_mr, waist_mr, neck_mr	measurement_type: "Body Fat %", "Waist", "Neck", measurement_value, measurement_date

### 1.5 Health Goals and Programs (12 Fields)

**Source:** OM Aggregation Database

**Destination:** HubSpot Contacts Object + Deals Object (for program enrollments)

**Import Method:** Goals to Contacts, active programs to Deals

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Business Logic
weight_goal	weight_goal	Number	High	Used for progress tracking
bmi_goal	bmi_goal	Number	High	Used for progress tracking
waist_goal	waist_goal	Number	High	Used for progress tracking

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Business Logic
goal_date	goal_target_date	Date	High	Milestone tracking
program_status	current_program_status	Dropdown	Critical	Active, Completed, Paused, Cancelled
program_start_date	program_start_date	Date	High	Program timeline tracking
program_end_date	program_end_date	Date	High	Program completion tracking

**Program Enrollment Logic:** - Active programs create Deal records in "ENNU Program Enrollment" pipeline - Program status maps to Deal stages - Program completion triggers outcome measurement workflows

## 1.6 Marketing and Attribution (15 Fields)

**Source:** OM Aggregation Database + Legacy CRM

**Destination:** HubSpot Contacts Object

**Import Method:** Initial bulk import + ongoing sync every 30 minutes

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Marketing Use
lead_source	original_source	Dropdown	High	Attribution tracking
lead_source_detail	original_source_detail	Single-line text	High	Campaign tracking
referral_source	referral_source	Single-line text	High	Referral program
marketing_campaign	first_conversion_event	Single-line text	High	Campaign ROI

OM Aggregation Field	HubSpot Destination	Field Type	Sync Priority	Marketing Use
utm_source	hs_analytics_source	Single-line text	High	Digital attribution
utm_medium	hs_analytics_source_data_1	Single-line text	High	Channel tracking
utm_campaign	hs_analytics_source_data_2	Single-line text	High	Campaign tracking

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## 2. WooCommerce E-commerce Data Import Mapping

### 2.1 Customer Data Synchronization

**Source:** WooCommerce Customer Database  
**Destination:** HubSpot Contacts Object  
**Sync Method:** WP Fusion real-time bidirectional sync

WooCommerce Field	HubSpot Destination	Sync Direction	Sync Frequency
customer_email	email	Bidirectional	Continuous
first_name	firstname	Bidirectional	Continuous
last_name	lastname	Bidirectional	Continuous
billing_phone	phone	Bidirectional	Hourly
billing_address_1	address	WooCommerce → HubSpot	Hourly
billing_city	city	WooCommerce → HubSpot	Hourly
billing_state	state		Hourly



WooCommerce Field	HubSpot Destination	Sync Direction	S F
		WooCommerce → HubSpot	
billing_postcode	zip	WooCommerce → HubSpot	H
customer_registration_date	woocommerce_registration_date	WooCommerce → HubSpot	M
customer_lifetime_value	woocommerce_lifetime_value	WooCommerce → HubSpot	H

## 2.2 Product Catalog Synchronization

**Source:** WooCommerce Products

**Destination:** HubSpot Products Object

**Sync Method:** WP Fusion automatic product sync

WooCommerce Field	HubSpot Destination	Sync Direction	Sync Frequency
product_name	name	WooCommerce → HubSpot	Real-time
product_description	description	WooCommerce → HubSpot	Real-time
product_price	price	WooCommerce → HubSpot	Real-time
product_sku	hs_sku	WooCommerce → HubSpot	Real-time
product_category	hs_product_type	WooCommerce → HubSpot	Real-time
stock_quantity	hs_recurring_billing_period	WooCommerce → HubSpot	Real-time

## 2.3 Order and Deal Synchronization

**Source:** WooCommerce Orders  
**Destination:** HubSpot Deals Object  
**Sync Method:** WP Fusion real-time order sync

WooCommerce Field	HubSpot Destination	Sync Direction	Deal Pipeline	Business Logic
order_id	woocommerce_order_id	WooCommerce → HubSpot	ENNU Program Enrollment	Creates new deal
order_total	amount	WooCommerce → HubSpot	ENNU Program Enrollment	Deal value
order_status	dealstage	WooCommerce → HubSpot	ENNU Program Enrollment	Status mapping
order_date	createdate	WooCommerce → HubSpot	ENNU Program Enrollment	Deal creation date
payment_method	payment_method	WooCommerce → HubSpot	ENNU Program Enrollment	Payment tracking

**Order Status to Deal Stage Mapping:** - pending → "Enrollment Pending" - processing → "Enrollment Processing" - completed → "Enrollment Active" - cancelled → "Enrollment Cancelled" - refunded → "Enrollment Refunded"

## 2.4 Subscription Management

**Source:** WooCommerce Subscriptions  
**Destination:** HubSpot Deals Object (recurring deals)  
**Sync Method:** WP Fusion subscription sync with recurring deal creation

WooCommerce Field	HubSpot Destination	Sync Direction	Sync Frequency	Automat
			Real-time	

WooCommerce Field	HubSpot Destination	Sync Direction	Sync Frequency	Automation
subscription_status	subscription_status	WooCommerce → HubSpot		Deal stage updates
next_payment_date	closedate	WooCommerce → HubSpot	Real-time	Deal close date
subscription_total	amount	WooCommerce → HubSpot	Real-time	Recurring revenue
billing_interval	billing_frequency	WooCommerce → HubSpot	Real-time	Payment scheduling

### 3. Clinical System Data Import Mapping

#### 3.1 Appointment Data Synchronization

**Source:** Open Medical + Open Dental Appointment Systems  
**Destination:** HubSpot Appointments Object (Meetings)  
**Import Method:** Initial bulk import + real-time sync every 5 minutes

Source Field	HubSpot Destination	Field Type	Sync Priority	Business Logic
appointment_id	open_medical_appointment_id	Single-line text	Critical	Primary identifier
patient_id	Contact Association	Association	Critical	Link to patient record
provider_id	hs_meeting_owner	User	Critical	Provider assignment
appointment_date	hs_meeting_start_time	Date & time	Critical	Schedule date
appointment_duration	hs_meeting_end_time	Date & time	Critical	Calculate end time

Source Field	HubSpot Destination	Field Type	Sync Priority	Business Logic
appointment_type	hs_meeting_type	Dropdown	High	In-person Telehealth Consultation
appointment_status	hs_meeting_outcome	Dropdown	High	Scheduled Completed Cancelled No-show
clinic_location	meeting_location	Single-line text	High	Physical location
appointment_notes	hs_meeting_body	Multi-line text	Medium	Clinician notes

### 3.2 Treatment and Procedure Data

**Source:** Open Medical + Open Dental Treatment Records

**Destination:** HubSpot Services Object + Tickets Object (for follow-up)

**Import Method:** Initial bulk import + sync every 15 minutes

Source Field	HubSpot Destination	Object	Sync Priority	Notes
treatment_id	treatment_record_id	Services	Critical	Treatment identifier
treatment_code	service_code	Services	High	CPT/ procedure codes
treatment_description	name	Services	High	Service description
treatment_date	service_date	Services	High	When performed
provider_id	service_provider	Services	High	Performing provider

Source Field	HubSpot Destination	Object	Sync Priority	Notes
treatment_cost	cost	Services	High	Service pricing
follow_up_required	Creates Ticket	Tickets	High	Automated follow-up

### 3.3 Laboratory Results Integration

**Source:** Laboratory Information Systems

**Destination:** Measurement History Custom Object

**Import Method:** Automated import every 5 minutes for new results

Lab System Field	HubSpot Custom Object Field	Field Type	Sync Priority	Clinical Logic
test_id	lab_test_id	Single-line text	Critical	Unique test identifier
patient_id	Contact Association	Association	Critical	Links to patient
test_name	measurement_type	Dropdown	Critical	Test type classification
test_result	measurement_value	Number	Critical	Numeric result
test_units	measurement_unit	Dropdown	Critical	Units of measure
reference_range_low	reference_range_low	Number	High	Normal range minimum
reference_range_high	reference_range_high	Number	High	Normal range maximum
test_date	measurement_date	Date	Critical	

Lab System Field	HubSpot Custom Object Field	Field Type	Sync Priority	Clinical Logic
				When test was performed
ordering_provider	ordering_provider	Single-line text	High	Provider who ordered
critical_flag	critical_value_flag	Checkbox	Critical	Triggers alerts

**Critical Value Automation:** - Critical values automatically create high-priority Tickets -  
Provider notifications sent immediately - Patient safety protocols triggered

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## 4. Telehealth Platform Integration

### 4.1 Virtual Session Data

**Source:** Telehealth Platforms (Zoom, Teams, Doxy.me)

**Destination:** Telehealth Sessions Custom Object

**Import Method:** Real-time webhook integration

Platform Field	HubSpot Custom Object Field	Sync Method	Sync Priority	Compliance
session_id	platform_session_id	Webhook	Critical	Session tracking
meeting_url	session_url	Webhook	Critical	Patient access
start_time	session_start_time	Webhook	Critical	Session timing
end_time	session_end_time	Webhook	Critical	Duration tracking
participant_count	participant_count	Webhook	High	Attendance
recording_url	recording_url	Webhook	High	Documentation
session_quality	session_quality_score	Webhook	High	

Platform Field	HubSpot Custom Object Field	Sync Method	Sync Priority	Compliance
				Quality monitoring
technical_issues	technical_issues	Webhook	Medium	Issue tracking

## 4.2 Compliance and Quality Tracking

**Source:** Telehealth Platform APIs + Manual Entry  
**Destination:** Telehealth Sessions Custom Object  
**Import Method:** Real-time API + manual updates

Compliance Field	HubSpot Field	Data Source	Sync Priority
state_licensing_verified	state_licensing_compliant	Manual/API	Critical
patient_consent_obtained	patient_consent_documented	Manual	Critical
identity_verified	patient_identity_verified	Manual	Critical
emergency_protocol_reviewed	emergency_protocol_compliant	Manual	Critical
session_privacy_confirmed	privacy_environment_verified	Manual	High

# 5. Ongoing Synchronization Strategy

## 5.1 Sync Frequency and Priority Matrix

Data Type	Source System	Destination	Sync Frequency	Method	Priority
Patient Safety Data	OM Aggregation	Contacts	Real-time (<5 sec)	Webhook	Critical
	OM/OD	Appointments		Webhook	Critical

Data Type	Source System	Destination	Sync Frequency	Method	Priority
Appointment Changes			Real-time (<5 sec)		
Payment Processing	WooCommerce	Deals	Real-time (<5 sec)	WP Fusion	Critical
Lab Results	Lab Systems	Measurement History	5 minutes	API Poll	Critical
Patient Demographics	OM Aggregation	Contacts	5 minutes	API Poll	High
Financial Data	OM Aggregation	Contacts	15 minutes	API Poll	High
Clinical Notes	OM/OD	Tickets/ Services	15 minutes	API Poll	Medium
Marketing Data	Various	Contacts	30 minutes	API Poll	Medium
Historical Data	OM Aggregation	Various	Daily	Batch	Low

## 5.2 Conflict Resolution Rules

Data Category	Master System	Conflict Resolution	Escalation
Clinical Data	OM Aggregation	OM wins, log conflict	Provider review
Contact Preferences	HubSpot	HubSpot wins, sync back	Marketing review
Financial Data	OM Aggregation	OM wins, alert billing	Billing team
Appointment Data	Most recent update	Timestamp comparison	Provider confirmation
E-commerce Data	WooCommerce	WooCommerce wins	Customer service



### 5.3 Error Handling and Recovery

Error Type	Detection Method	Recovery Action	Escalation Time
Sync Failure	API monitoring	Automatic retry (3x)	15 minutes
Data Corruption	Validation checks	Rollback + manual review	Immediate
Missing Records	Audit reports	Re-sync from source	1 hour
Duplicate Records	Duplicate detection	Merge + audit trail	4 hours
Critical Value Alerts	Real-time monitoring	Immediate notification	Immediate

### 5.4 Performance Monitoring

Metric	Target	Monitoring Method	Alert Threshold
Sync Latency	<30 seconds	Real-time dashboard	>60 seconds
Success Rate	>99.5%	Automated reporting	<99%
Data Quality	>99.9%	Validation scripts	<99.5%
System Uptime	>99.9%	Health checks	<99%
Error Rate	<0.1%	Error logging	>0.5%

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## 6. Implementation Timeline

#### Phase 1: Initial Data Import (Weeks 1-3)

- **Week 1:** OM Aggregation patient demographics and contact info
- **Week 2:** Financial data, health metrics, and goals
- **Week 3:** Historical measurement data and marketing attribution

#### Phase 2: E-commerce Integration (Weeks 4-5)

- **Week 4:** WooCommerce customer and product sync setup
- **Week 5:** Order history import and subscription management

## Phase 3: Clinical System Integration (Weeks 6-7)

- **Week 6:** Appointment and treatment data import
- **Week 7:** Laboratory system integration and telehealth setup

## Phase 4: Ongoing Sync Activation (Weeks 8-9)

- **Week 8:** Real-time sync activation and testing
  - **Week 9:** Performance optimization and monitoring setup
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# 7. Success Metrics and Validation

## Data Migration Success Criteria

- **99.9% data migration accuracy** - All 165 OM fields successfully imported
- **Zero data loss** - Complete audit trail of all imported records
- **<24 hour migration time** - Full import completed within one business day
- **100% field mapping validation** - All fields correctly mapped and validated

## Ongoing Sync Performance Targets

- **<30 second sync latency** for critical data
- **99.5% sync success rate** across all integrations
- **<0.1% error rate** for all synchronization operations
- **100% critical value alert delivery** within 5 seconds

## Business Impact Measurements

- **40% improvement** in data accessibility and reporting
  - **60% reduction** in manual data entry and reconciliation
  - **25% improvement** in patient care coordination
  - **50% enhancement** in marketing attribution accuracy
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**Document Classification:** Technical Implementation Guide

**Author:** Manus AI

**Version:** 1.0

**Date:** June 20, 2025

**Distribution:** ENNU Technical Team, Implementation Partners