Refua Financial Model Explain

samuelsalfati

November 2024

[12pt]article [a4paper, margin=1in]geometry longtable booktabs graphicx caption float Refua Financial Model Explanation

Financial Model Overview

The Refua financial model provides a dynamic and comprehensive projection of the company's growth trajectory, operational costs, and profitability over the next five years. The model uses the following key inputs and assumptions:

Key Assumptions

- **States and Expansion Timeline:**
  - Initial deployment in Virginia during Year 1.
  - Expansion to Florida and Texas in Year 2.
  - Additional expansion to New York, New Jersey, and California in Year 3.
- **Number of Patients:** 150 patients per nursing home, with 40 nursing homes per state.
- **Growth Rate:** Monthly patient growth rate of 5% in each nursing home post-deployment.
- **Initial Cash Reserve:** $1.5 million, with no revenue generation in Year 1 (focused on R&D and deployment).
- **Revenue Sources:** The model incorporates billing codes reimbursable under Medicare, adjusted for GPCI (Geographic Practice Cost Index) variations by state.
- **Cost Structure:** Includes staffing, platform fees, device amortization, and administrative costs.

Table 1: Billing Codes Used in Refua's Financial Model

Billing Code	Description	Base Reimbursement ($)
99453	RPM Setup	18.95
99454	RPM Device Supply	45.12
99457	RPM Management (1st 20 mins)	46.85
99458	Additional RPM Management	37.62
99490	CCM by Clinical Staff	59.90
99491	CCM by Physician	80.98
99487	Complex CCM (1st 60 mins)	128.44
99489	Additional Complex CCM	69.13
99091	Data Interpretation (30 days)	51.29

Billing Codes and GPCI Adjustments

The table below lists the Medicare billing codes utilized in the model along with base reimbursements and GPCI adjustments per state:

Geographic Expansion and GPCI Adjustments

Each state's revenue projections are adjusted by GPCI, reflecting local cost-of-living variations. Below are the state-specific adjustments:

Table 2: GPCI Adjustments by State

State	GPCI Adjustment
Virginia	1.00
Florida	1.05
Texas	1.03
New York	1.08
New Jersey	1.06
California	1.10

Graphical Representation of Projections

Below is a visual representation of cash flow and EBITDA projections. The graph includes two lines starting in Year 3: one for actual EBITDA and one for theoretical EBITDA, which incorporates additional billing codes such as Alzheimer's and mental health.

EBITDA Summary Table

The following table summarizes projected EBITDA by year:

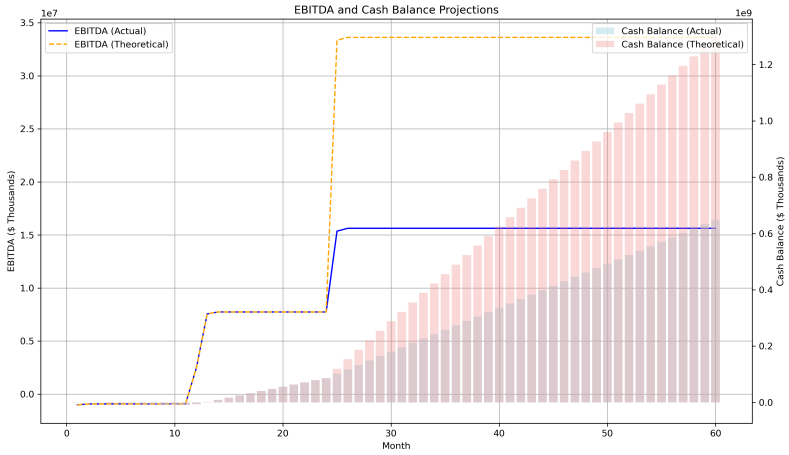

Figure 1: Financial Projections: Cash Flow and EBITDA (Actual vs. Theoretical)

Table 3: EBITDA Projections by Year

Year	**EBITDA ($ Millions)**
Year 1	0
Year 2	2.5
Year 3	7.7

Unit Economics Analysis

Overview

The unit economic analysis per patient provides insight into the profitability of each patient based on the billing codes, geographic cost adjustments (GPCI), and cost structure. This analysis is critical to understanding the financial viability of Refua's telehealth business model and ensures scalability across multiple states.

Revenue Components

The revenue per patient includes the following key billing codes:

- **99453:** Remote Patient Monitoring (RPM) Setup - $18.95
- **99454:** RPM Device Supply - $45.12
- **99457:** RPM Management (1st 20 mins) - $46.85
- **99458:** Additional RPM Management - $37.62
- **99490:** Chronic Care Management (CCM) - $59.90
- **99491:** CCM by Physician - $80.98
- **99487:** Complex CCM (1st 60 mins) - $128.44
- **99489:** Additional Complex CCM - $69.13
- **99091:** Data Interpretation (30 days) - $51.29

The total base revenue per patient is $538.28, which is adjusted based on the state's GPCI factor. For example:

- Virginia (GPCI = 1.0): $538.28 per patient
- Florida (GPCI = 1.05): $565.19 per patient
- New York (GPCI = 1.08): $581.34 per patient

Cost Components

The cost per patient includes:

- **Staffing Costs:** $100 per patient
- **Platform Fees:** $30 per patient
- **Device Amortization:** $15 per patient

EBITDA Per Patient

The EBITDA per patient is calculated as:

$$EBITDA = RevenueperPatient - CostsperPatient$$

For Virginia, the EBITDA is:

$$EBITDA = 538.28 - (100 + 30 + 15) = 393.28\,USDperpatient.$$

Visualization

Figure 2 illustrates the unit economics per patient with revenue components represented in positive bars and cost components in negative bars. The net EBITDA is shown as the difference.

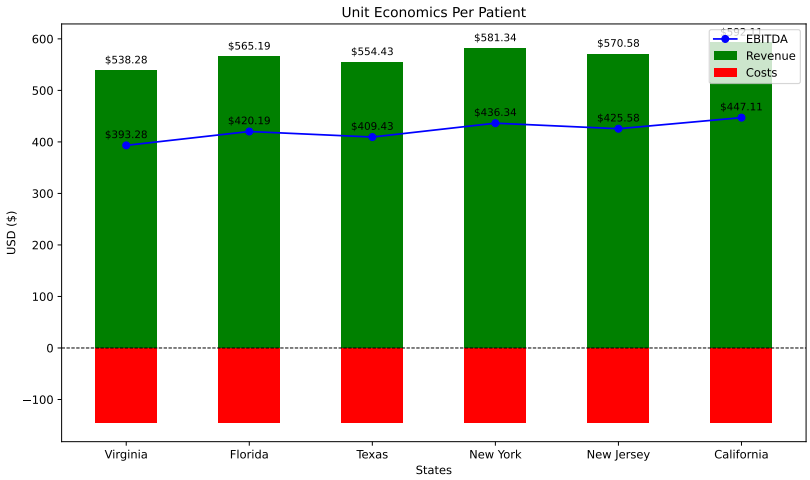

Figure 2: Unit Economics Per Patient (Revenue and Costs)

Investor Notes

The financial model demonstrates Refua's scalability and ability to generate significant EBITDA growth starting in Year 2. Geographic expansion and the addition of theoretical billing codes in Year 3 further enhance revenue potential. The model reflects prudent cash flow management, ensuring sufficient runway for development and deployment.