



OralVision

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CONCEPT ID: 10274



177,000 people die from oral cavity cancer each year across the globe.

Nearly 70% of oral cancer cases are diagnosed too late to be treatable.

Over 2/3 of these cases are concentrated in underprivileged medical deserts worldwide.

01 | THE PROBLEM





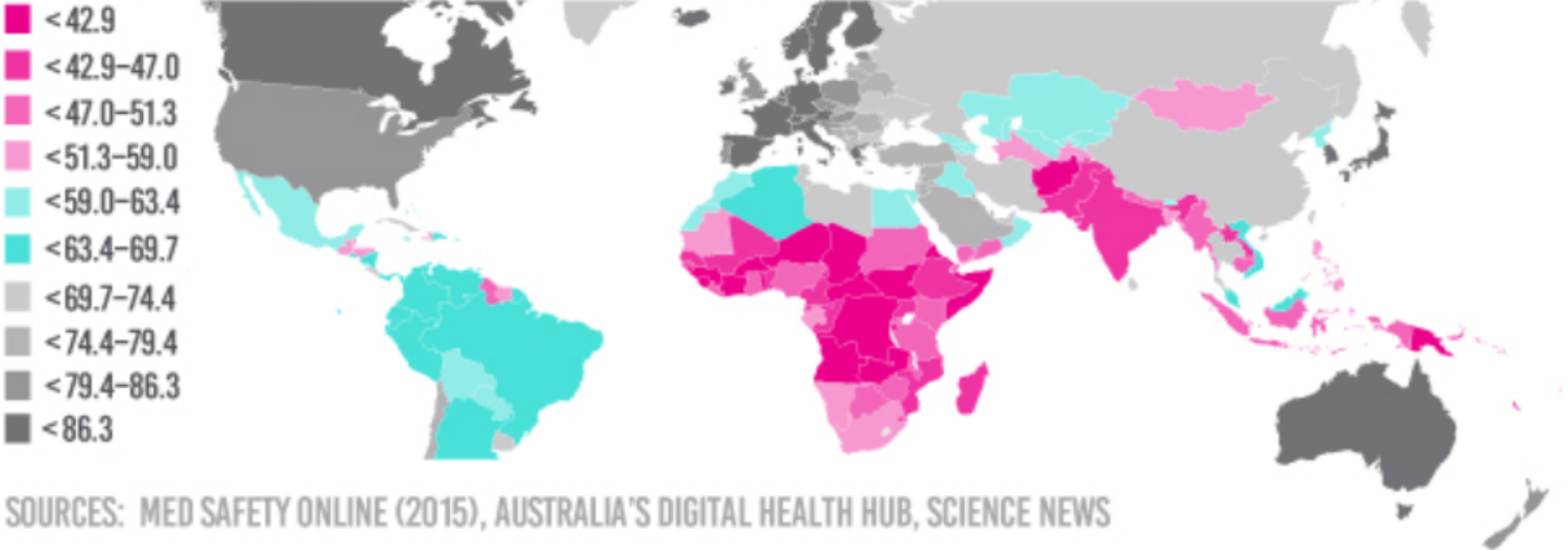
Underserved communities **cannot afford** expensive medical equipment

Industry-leading fluorescence-based imaging solutions cost **upwards of \$2,400**

Clinics in underprivileged areas suffer **disproportionately high mortality rates**

02 | THE PROBLEM

GLOBAL ACCESS TO HEALTHCARE, 2015



ViziLite PRO Oral Cancer Lesion Screening System (Denmat)

SKU: D200334
Weight: 1 lbs
Vendor: [DenMat](#)
Manufacturer part number: PLS1001
Price: **\$2,413.99**



VELscope® Value Bundle

\$2,495.00

Quickly becoming the Professional's Choice, this easy to use, portable handheld device is guaranteed to elevate the standards of oral health assessment and patient care. Get Started TODAY with the Value Bundle, contact your preferred distributor for special pricing.

Out of stock



OralVision: Overview

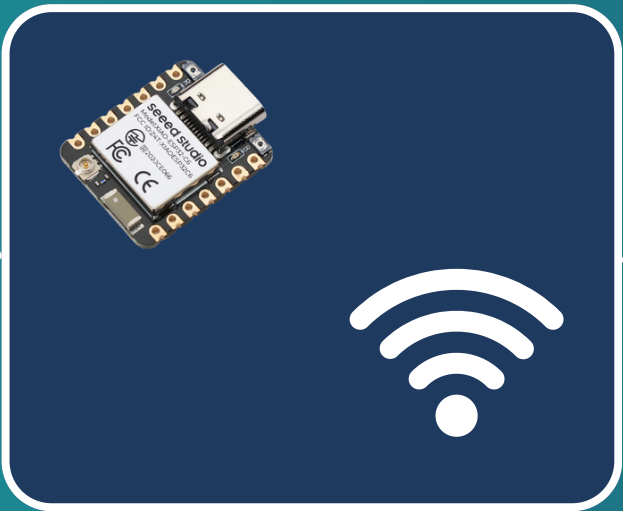
Sensing Layer



Periodically takes **high resolution images** of a patient's mouth

Controlled via a simple push button

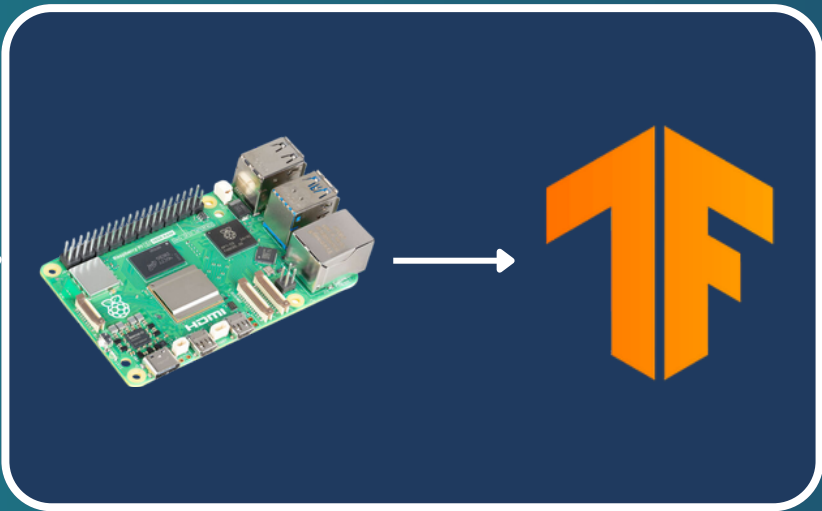
Processing Layer



Compresses images and utilizes **visual filters** for image quality

Transfers information to neural network automatically

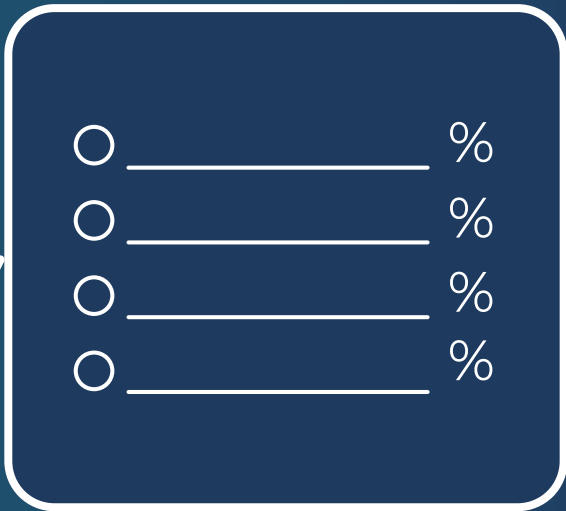
Inference Layer



Employs a **Raspberry Pi 5** with **deep learning** to analyze images for **evidence of cancer**

Federated learning improves ML parameters while maintaining HIPAA compliance

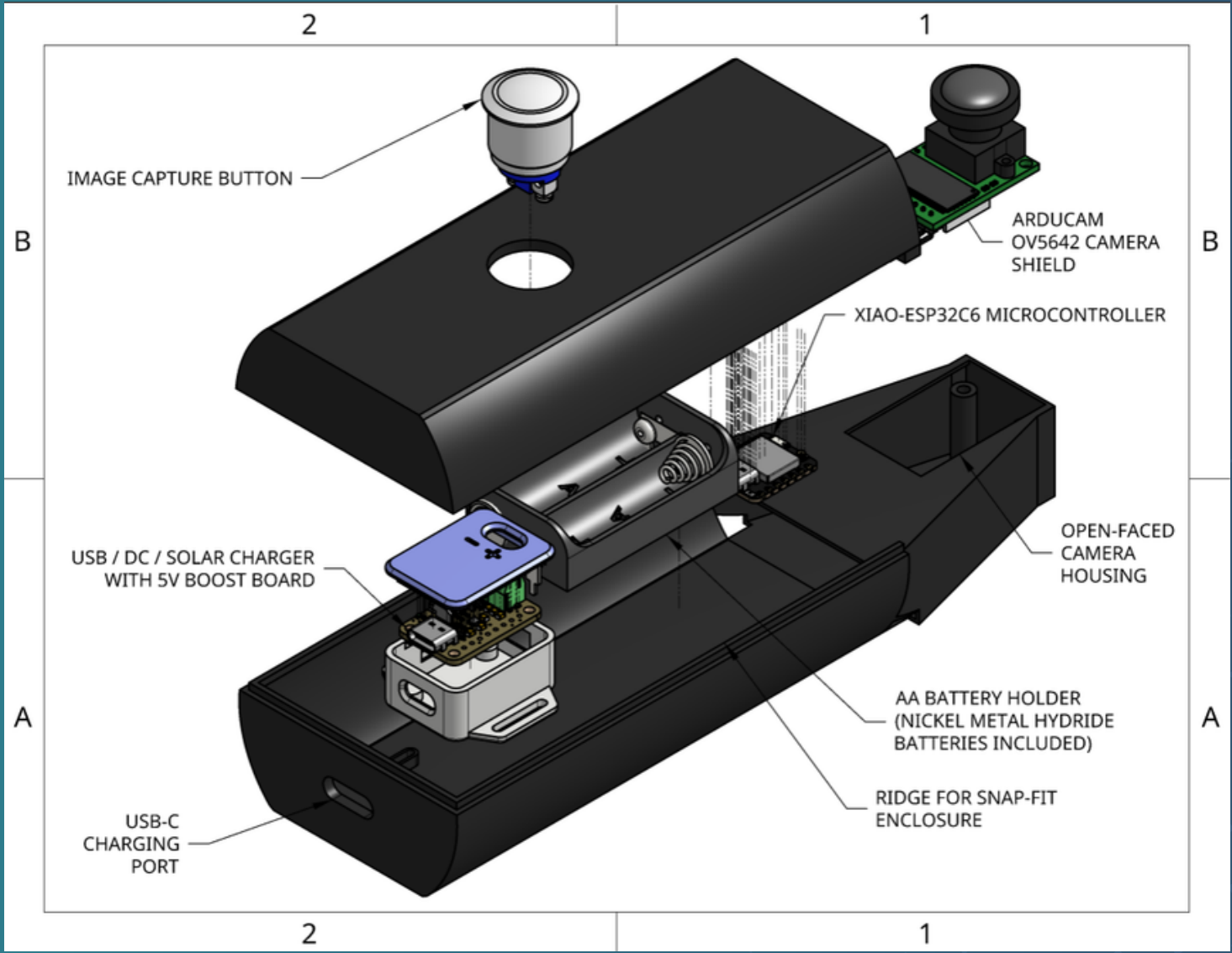
Output Layer



Diagnostic predictions and **Bayesian probabilities** are presented in a simple UI for **physicians**



Prototype: OralVision V1





The global intraoral cancer diagnostics market is valued at approximately **\$535,000,000 USD** as of 2025

Over **380,000** new cases of oral cavity cancer are diagnosed across the world every year.

Many of these cases are concentrated in South Asia, where unhealthy lifestyle choices like smoking and betel nut consumption are prevalent

\$535M

**380k
cases**





VELScope Vx

ViziLite Pro

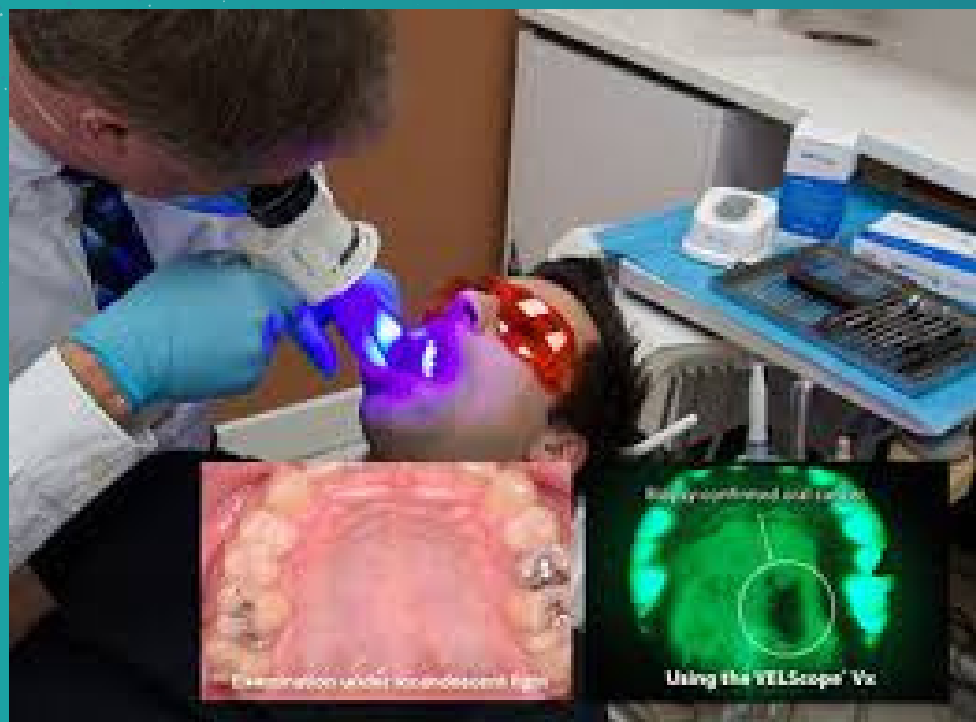
OralVision V1

Federated-Learning-Based Reinforcement	Computer-Vision-Guided Diagnosis	Oral Ergonomic Support	Price
X	X	✓	\$2495.00
X	X	X	\$2413.99
✓	✓	✓	\$749.99



87.15% identification accuracy

1.64x better than leading competition (VELScope)



F1 (sensitivity) score of 0.8655

1.26x better than leading competition (VELScope)

07 | EXPERIMENTAL VALIDATION



Price Model

(per unit)

Cost of Goods Sold (COGS)

\$503.00

\$82 - RPI5 Screen (HMI)

\$125 - 16 GB RPI5

\$100 - 3D Printing Costs

\$40 - 5 MP Arducam

\$156 - Miscellaneous Electronic Costs

Distribution/Logistics

\$18.25

\$18.25 - FedEx Express
Saver (5 lb package) for
regional distribution

Retail Cost

\$744.99

A 33% margin of revenue will
be reinvested into R&D,
manufacturing operations,
and marketing



Long-Term Roadmap

**Q4
2025**

OralVision started initial development of prototype V1 and the ML model

**Q1
2026**

OralVision was validated in experimental trials and a provisional patent was filed with the USPTO

**Q2
2026**

Start a crowdfunding campaign for \$50,000 to kickstart operations

**Q3
2026**

File for FDA 510(k) premarket clearance and initiate a pilot program with local clinics

**Q4
2026**

Begin development of an improved V2 device and expand distribution to underserved regions across Texas

**Q1
2027**

File a utility patent with the USPTO and start mass production of OralVision V2



OralVision

Thank You!