

MASANGA



IMPROVE  
ORAL CARE FOR EVERYONE

## IMPROVING DENTAL CARE, MASANGA HOSPITAL, SIERRA LEONE



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PROJECT PLAN 2025  
Stichting Improve, Masanga Hospital

## Improving Dental Care at Masanga Hospital, Sierra Leone

### 1. Introduction

Masanga Hospital, situated in the Tonkolili District in northern Sierra Leone, serves as a vital regional healthcare center for a population of over 440,000 people. Located in a rural, remote area with limited infrastructure, Masanga provides access to general medical services, surgical interventions, maternal and child health care, and now, increasingly, education and public health outreach. Yet despite the breadth of services offered, there is a glaring omission: access to dental care.

Oral health issues are pervasive in Sierra Leone, particularly in rural areas like Tonkolili. Many people suffer from untreated dental caries, gum infections, and more severe complications such as jaw abscesses and osteomyelitis. In 2024 alone, Masanga Hospital admitted over twenty patients with life-threatening facial abscesses, often arriving in septic condition. In many of these cases, simple dental interventions performed earlier could have prevented the progression. The lack of early-stage treatment and preventive education exacerbates suffering, reduces quality of life, and even leads to death.

Dental care remains underdeveloped in the national healthcare strategy and is often considered a luxury rather than a necessity. There are few trained professionals, limited infrastructure, and low public awareness. In this context, the proposed dental project aims to establish an integrated, sustainable dental service at Masanga Hospital, combining treatment, outreach, training, and long-term capacity building.



Figure 1 / Two of the buildings of the Masanga Hospital ([www.masangahospital.org](http://www.masangahospital.org))

### 2. Project Objectives

The vision of this project is to build a functioning, community-trusted dental clinic within Masanga Hospital, linked to outreach services in the surrounding villages and schools. The project is built around several core objectives:

- a. Provide basic dental services such as extractions, cleanings, and pain relief treatments.
- b. Increase awareness and understanding of dental hygiene and early intervention through education.
- c. Equip a dental clinic space within Masanga Hospital with reliable tools, including a manual dental chair and dental X-ray machine.
- d. Reduce the incidence of advanced oral infections by improving early access to care.
- e. Develop a model that can be expanded to other regions in Sierra Leone.

### 3. Context and Rationale

Dental health is deeply linked to broader public health outcomes. Poor oral health has a documented impact on nutrition, education, and productivity. In Sierra Leone, misconceptions about dental care are widespread, and trust in the healthcare system is fragile. Many people fear dental treatment due to stories of painful procedures or poor outcomes from unqualified providers.

Moreover, logistical and financial barriers hinder access. Roads are in poor condition, especially during the rainy season, and the cost of traveling to a facility is often unaffordable. For many, the only available care is from informal or traditional practitioners, whose interventions can be unsafe.

A critical part of the project is therefore not just technical infrastructure but also relationship building. By partnering with local leaders, schools, and health units, we aim to position the clinic as a safe and reliable provider of care. Trust, once earned, will be the foundation for long-term engagement and improved health outcomes.



**Figure 2 / This is one of the patients with a dental abscess seen at Masanga hospital (foto [www.masangahospital.org](http://www.masangahospital.org))**

### 4. Implementation Strategy

The implementation of this project will follow four distinct but interconnected phases:

#### **Phase 1: Community Outreach and Education**

In the first phase, the project will launch a robust outreach campaign aimed at raising awareness, building trust, and promoting basic dental hygiene practices. Key activities will include:

- Visiting 25 schools annually, focusing on pre-school and Class 1 pupils. These age groups are ideal for introducing habits early and addressing visible dental problems.
- Conducting 35 community health talks in collaboration with existing PHU and CHC outreach programs. These talks will coincide with maternal and child health services to maximize attendance.
- Distributing toothbrushes, toothpaste, and visual learning materials such as posters and dental puppets.
- Using a referral system to send children and adults with dental issues to the clinic, including the option for follow-up dental camps.

We anticipate reaching over 5,000 individuals through these combined efforts annually. Feedback mechanisms will include surveys, community leader feedback, and simple knowledge assessments before and after outreach.

## Phase 2: Clinic Setup and Infrastructure

Simultaneously, the dental room at Masanga Hospital will be renovated and equipped. Equipment will include:

- A high-quality manual dental chair (ordered, €2,700), suitable for the limited and variable electricity supply.
- A dental X-ray machine (estimated €4,000), essential for proper diagnosis and planning. (digital (computer needed) or analog (x-ray film processor and liquids needed))
- Lighting, sterilization units, dental trays, and cabinets. (Dit staat niet in de begroting) Is dit aanwezig of moeten we kijken wat er nog mist?
- Installation and maintenance support by a trained biomedical technician.

The clinic is expected to be operational by the end of 2025. The dental chair is already on its way and will be installed in Q3. The x-ray machine and additional required equipment can be ordered once the project is confirmed after consultation and agreement, with delivery expected at Massanga in Q2 2026.

## Phase 3: Staff Training and Capacity Building

The clinic will be staffed by:

- One full-time dental nurse (likely Tamba Conteh).
- Two trained part-time assistants (TY and Frank), plus a rotating support assistant (Aminata).
- Ongoing ?? preventive mentorship by a qualified dentist from Mercy Ships, including site visits and remote learning sessions. -> We moeten kijken hoe intensief dit kan/ lukt.

Staff will be trained in patient communication. Regular refresher courses and monthly peer review meetings will ensure quality assurance. Staff will be working under medical

supervision of the doctors at the Massanga hospital. A running protocol will be in place make clear and keep track of the limits and when a referral is necessary.

#### Phase 4: Operation and Patient Flow Expansion

The clinic will open fully to the public following training and pilot testing. Initial patient flow is projected at 3–10 patients per day. Within a year, this will rise to 15–20 per day, based on outreach conversion and word-of-mouth.

All services will be recorded in a clinic database, and anonymized data will be used for reporting and impact evaluation. Small fees (approximately €1–€3) will be introduced gradually to support sustainability while ensuring accessibility.

### 5. Financial Overview

Expense Category:	Annual Cost (EUR)	One Time Cost (EUR)
Salary - Full-time Dental Nurse	€3,000	
Part-time Assistant Support 1 of 2?	€1,800	
Education and Outreach Materials	€1,200	
Transportation and Outreach	€2,000	
Equipment Maintenance	€750	
Training and Supervision	€1,500	
Manual Dental Chair (one-time)		€2,700
Dental X-ray Machine and other instruments (one-time)		€4,000
<b>TOTAL ANNUAL COSTS:</b>	<b>€10,250</b>	
<b>TOTAL ONE TIME COSTS</b>		<b>€6,700</b>
<b>Total Cost Year 1: € 16,950</b>		
<b>Cost year 2: € 10.250</b>		
<b>Total year 1 &amp; 2 € 27.200,-</b>		

Recurring costs from Year 2 onward are estimated at €10,250. The project is fully funded for the first two years by Stichting Improve. Long-term options include donor support, partnerships with NGOs, and patient contributions.

### 6. Monitoring and Evaluation

We will implement a structured monitoring plan that includes:

1. Outreach attendance sheets and participant feedback forms.
2. Monthly reports on clinic visits, treatments performed, and referrals.
3. Photos and stories to document outreach and patient impact.

4. Annual review sessions involving all stakeholders.

Key indicators will include:

1. Number of patients treated
2. Number of outreach sessions conducted
3. Community awareness levels **how to measure?**
4. Staff retention and performance **how to measure?**

## 7. Long-Term Vision

This initiative is the first step in creating a national framework for rural dental care in Sierra Leone. By testing and refining the model at Masanga, we gain the tools and evidence to expand to other sites such as Makeni and Bo.

Ultimately, our aim is to normalize oral health as part of primary care, introduce dental training programs, and build a network of care providers capable of meeting the needs of their communities. Prevention, early treatment, and community empowerment will form the pillars of this transformation.

## 8. Conclusion

The establishment of a dental prevention project and an upgrade of the dental clinic at Masanga Hospital is more than just a health infrastructure project. It is a practical solution to the current suffering, and a model of what is possible through local-global cooperation. Together, we can prevent needless deaths, alleviate daily pain, and restore dignity and health to thousands of people.

## 9. Contact

- Stichting Improve: Harmen Westerduin ([www.stichtingimprove.nl](http://www.stichtingimprove.nl))
- Masanga Hospital: Marloes (Dutch Doctor, Wouter Nolet foundation), Kosse (Dutch Doctor, CapaCare), Tamba Conteh (Nurse, trained for dental work). ([www.masangahospital.org](http://www.masangahospital.org))
- Clinical collaboration: Christina (German Dentist at Mercy Ships)



Figure 3 / Two of the nurses who are trained in dental work (right side: Tamba Conteh) and Marijke and Harmen from Stichting Improve at the Masanga Hospital in April 2025



Figure 4 / Location Masanga Hospital in the Tonkolili district in Sierra Leone