Sustainable Development Goals (SDGs) – universal health coverage is central to Goal 3, omnibus health goal – ensure healthy lives and promote wellbeing for all at all ages:

Goal 3.8 of SDGs to achieve universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medications and vaccines for all by 2030.

WHO definition of universal health coverage: UHC “means that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.”
ORAL HEALTH CARE AS A COMPONENT OF ESSENTIAL HEALTH SERVICES

WHO recognizes the “intrinsic link between oral health, general health and quality of life” (resolution WHA 60.17)

Oral decay is linked to malnutrition, cardiac disease, diabetes, low birth weight, and depressed immune competency

WHO definition of oral health care: “A state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity.”

WHO has a Global Oral Health Programme

However lists of essential health services and indicators for UHC do not include oral health care
NEED FOR IMPROVED ORAL HEALTH CARE

Oral diseases are the most common noncommunicable diseases

Global Burden of Disease Study 2016 estimated that oral diseases affected half of the world’s population (3.58 billion people) with dental caries (tooth decay) in permanent teeth being most prevalent condition assessed

Oral health has not improved in past 25 years

Severe periodontal (gum) disease, which may result in tooth loss, was estimated to be the 11th most prevalent disease globally

Oral manifestations of HIV infection occur in 30% to 80% of people with HIV

Oral infections can be life-threatening

In some Asian-Pacific countries, the incidence of oral cancer (cancer of the lip and oral cavity) is within the top 3 of all cancers
In many poor and middle income countries standard of oral hygiene is low

Coverage for oral health service in adults with expressed needs is estimated to be 35%

The majority of 12-year-old children have untreated dental carries (decay/cavities) with risk of pain, disfigurement, and spreading infections likely resulting in loss of teeth at young age

Currently oral health care in most rural and some urban areas in these countries is difficult to obtain and, if available, tooth extraction is predominant mode of treatment

Behavioral risk factors for oral diseases are shared with other major NCDs, such as an unhealthy diet high in free sugars, tobacco use and harmful use of alcohol
WHY INSUFFICIENT ORAL HEALTH SERVICES IN LMIC COUNTRIES

Access to oral health services is low in LMIC

A failure of policy makers to acknowledge that oral conditions pose a serious public health problem and that oral health goals must be included in the health agenda

Absence of preventive measures like fluoride in drinking water, availability of low cost fluoride tooth paste, teaching or oral care in school curriculums

Lack of availability of oral health professionals

- In Africa the ratio of dentists to population is 1:150,000 compared with 1:2,000 in industrialized countries
- Insufficient training facilities

Graduates of 4 to 6 year training courses disdain practicing in poor and rural areas and oppose use of dental auxiliary personnel there
Currently oral care is inadequately integrated into the PHC system in most low and middle income countries

Historic separation of oral care from medical care

In many settings dentistry is treated more as a cosmetic initiative that basic health care

Dentistry’s traditional approach toward individual care rather than a community approach along with its inherently technical rather than social and behavioral character

Dentistry’s insistence that only fully trained professionals with full dental degrees should be allowed to practice dentistry
In low income countries traditional western oral health approaches should be replaced by a service that follows principles of PHC and offers care at a cost that the country and community can afford.

“Task-shifting” basic primary oral care to community health workers and other auxiliary health officers with some training.

Define fluoride toothpaste as an essential medicine and development of facilities to make fluoride toothpaste more affordable and accessible with proper packaging to distinguish it from counterfeit versions.

Educational institutions should incorporate oral health promotion and oral disease prevention in their curriculum.
ORAL URGENT TREATMENT FOR LOW RESOURCED AREAS

WHO recommends a package of Oral Urgent Treatment able to manage majority of cases requiring basic emergency oral care including

- extraction of badly decayed and severely periodontally involved teeth under local anesthesia
- treatment of post-extraction complications such as dry sockets and bleeding
- referral of complicated cases to nearest hospital
- drainage of localized oral abscesses
- palliative drug therapy for acute oral infections
- first aid for dento-alveolar trauma
Conventional restorative treatment approaches rely heavily on electrically driven equipment that is expensive and difficult to maintain and complex to use – usually restricts treatment to a dental clinic so it is impractical in poor and middle income countries.

Atraumatic Restorative Treatment uses hand instruments and involves no dental drill, plumbed water or electricity.

Uses hand excavators for removing infected dentine.

The cavities and adjacent fissures are filled with an adhesive fluoride releasing restorative material.

Because all sound tooth tissue is retained during cleaning of the cavity, pain and discomfort are rare during treatment virtually eliminating need for an anesthetic.

In studies three year survival percentages were between 77% and 92%.
TRAINING & PERSONNEL

In Cambodia primary health care nurses implement the Basic Package of Oral Care after a five month dental training program.

In Tanzania rural medical aids provide pain relief through tooth extraction supported by drug therapy at rural health centers or dispensaries:
- Basic training for rural medical aids lasts three years.
- The dental upgrading training is accomplished through a short in-service training course.

In Nepal, health assistants with duties that include oral health education, tooth extraction and first aid for maxilla-facial trauma have been trained in a few months.
JEVAIA ORAL HEALTH CARE PROGRAM IN NEPAL

NGO program with goal to establish a sustainable, community based dental care program in rural areas of Nepal

Untreated oral carries (cavities) is Nepal’s most prevalent childhood disease, exceeding even malnutrition

69% of adults over 50 suffer from oral disease – making it one of the most widespread and least addressed health problems in the country

Model includes a local dental clinic staffed by a rural dental technician, school-based oral health education and prevention, and vendo outreach

Program works in each village for 2.5 years

A team of three residents are trained to implement the project with intensive guidance and ongoing training
Each Jevaia clinic begins with dental training for local health care practitioner from the village

To qualify, technicians must have a community medical assistant degree or higher

The three week training is provided by Health Development Society Nepal

Each new technician receives medical supervision and mentoring on a declining schedule throughout first six months of service

Thereafter, clinics are supervised quarterly and participate in an annual medical audit by a medical trainer

Clinic assistants are trained internally through team-building workshops with their medical trainers – many clinic assistants are promising high school graduates

Pictures that follow courtesy of Laura Spero
• 49.9% prevalence of ‘self reported’ dental caries in 45-69 year olds (STEPS 2013)

• 69% prevalence of dental caries in adults over 50 (Yee, 2004)

• 57.5% prevalence of dental caries among 5-6 year olds (Yee, 2004)
Jevaia has established 11 rural dental clinics that are entirely community-based.
Basic Package of Oral Care
✓ Glass Ionomer Fillings
✓ Extraction
✓ SDF & fluoride varnish
✓ Referral to hospitals
Junk food Free zones

VENDOR OUTREACH
COMMUNITY EDUCATION
School Brushing Programs run by teachers