



APP BASED MICROWAVE MEDICAL WASTE STERILIZATION & INFECTION CONTROL DEVICE

Product Co-developed by :-



ABOUT US

Established in 1941 SS
Medicals specializes in
**“Microwave based”
Disinfection and
Sterilization technology.**

Our Trailblazing products
provide sustainable
solutions for the
**Pre-Treatment of Bio-
Medical Waste to combat
Infection Control.**

Innovation Focus: SSMED prioritizes innovation, aiming to create impactful solutions for global healthcare challenges.

Scalable Impact: Our solutions are designed for scalability, reaching a wider population to address global healthcare issues effectively.

Microwave Sterilization: Specializing in microwave-based cold sterilization* , our technology enhances patient safety with POCD*.

Deep Tech Expertise: With over 400 years of combined experience, SSMED drives medical advancements through deep tech research and disruptive approaches.

Disruptive Sustainability: Our automated and sustainable devices challenge healthcare norms, offering cost-efficient alternatives and promoting “Pro Planet” approach.

*POCD- Point of Care Disinfection.

*Cold Sterilization- Sterilization at 70°C

SEVERE GAPS IN “BIO-MEDICAL WASTE MANAGEMENT”



Compromised On-site Infection Management

- Deaths in India due to HAI 9 million per year*
- No Real time HAI Audit
- Compromised Documentation
- Serious lack of Sanitation



Unethical BMW Disposal

- Dioxins & Furans
- Mixed with Municipal
- Food chain pollution



Pilferage & Reuse

- **27% unethical reuse***
- **Terminal diseases – HIV.**
- Major illnesses – Hepatitis B



Alarming Increase in HAI

- **PHC:CHC in Dist. Hospitals**
- **5 X higher than WHO standards..**
- Health Care Workers
- Patients
- Visitors

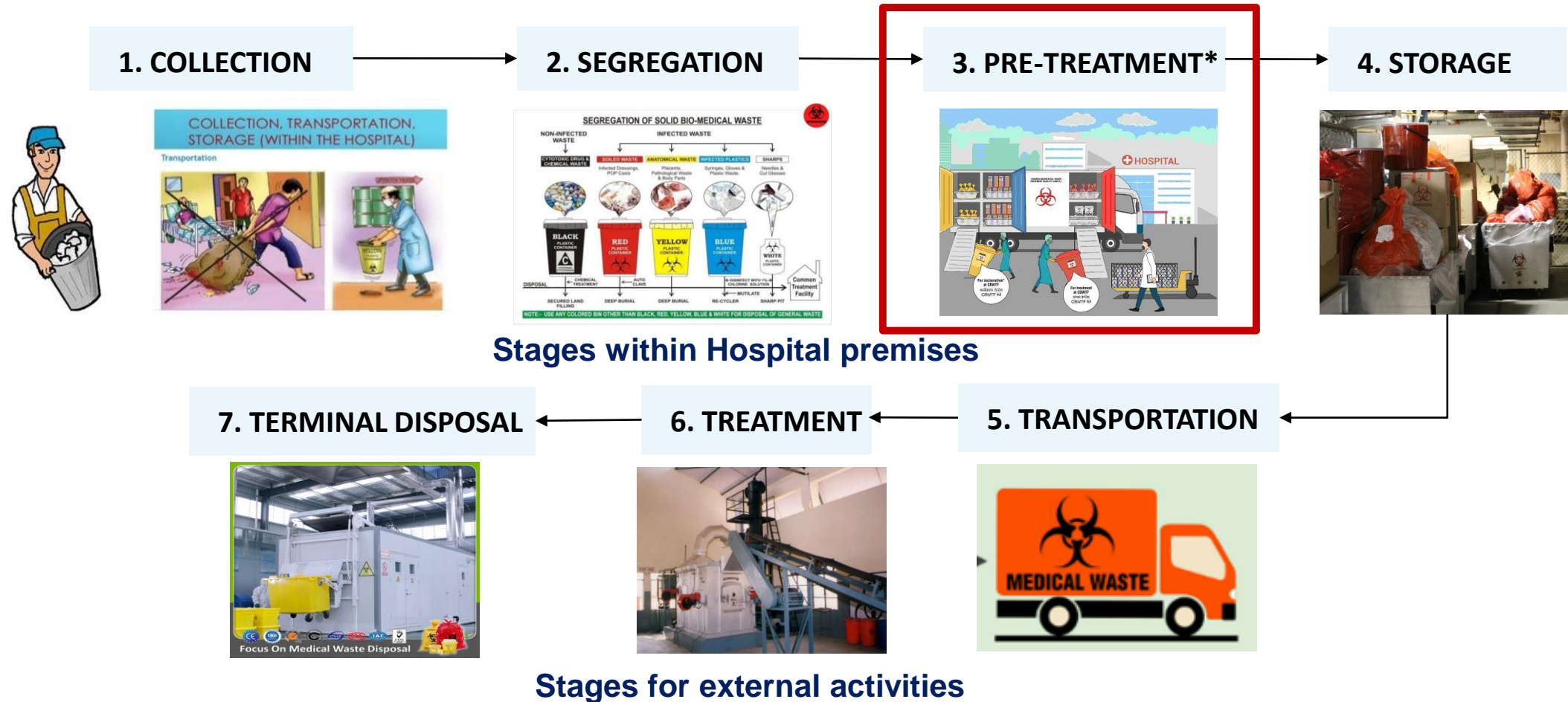


High Operational Cost

- Secondary Equipment required
- Installation area
- RO Water

HOW “THE BMWW PROBLEM” HANDLED

“Pre-Treatment made Mandatory”



*Included in the G.S.R. 343(E). [28-03-2016]: Bio-Medical Waste Management Rules, 2016

TRADITIONAL MONITORING METHODOLOGY

Machine Operator collects
Batch data **manually**

Limited Accountability
No HAI Control

High Overheads

- Morbidity
- Medicine Expenses
- Hospital Reputation

**Failure of Healthcare
Matrix** – PHC, CHC in
District Hospitals

SERIOUS GAPS: WITH THE TRADITIONAL METHODOLOGY

Very high cost of Operation : with **no traceability**

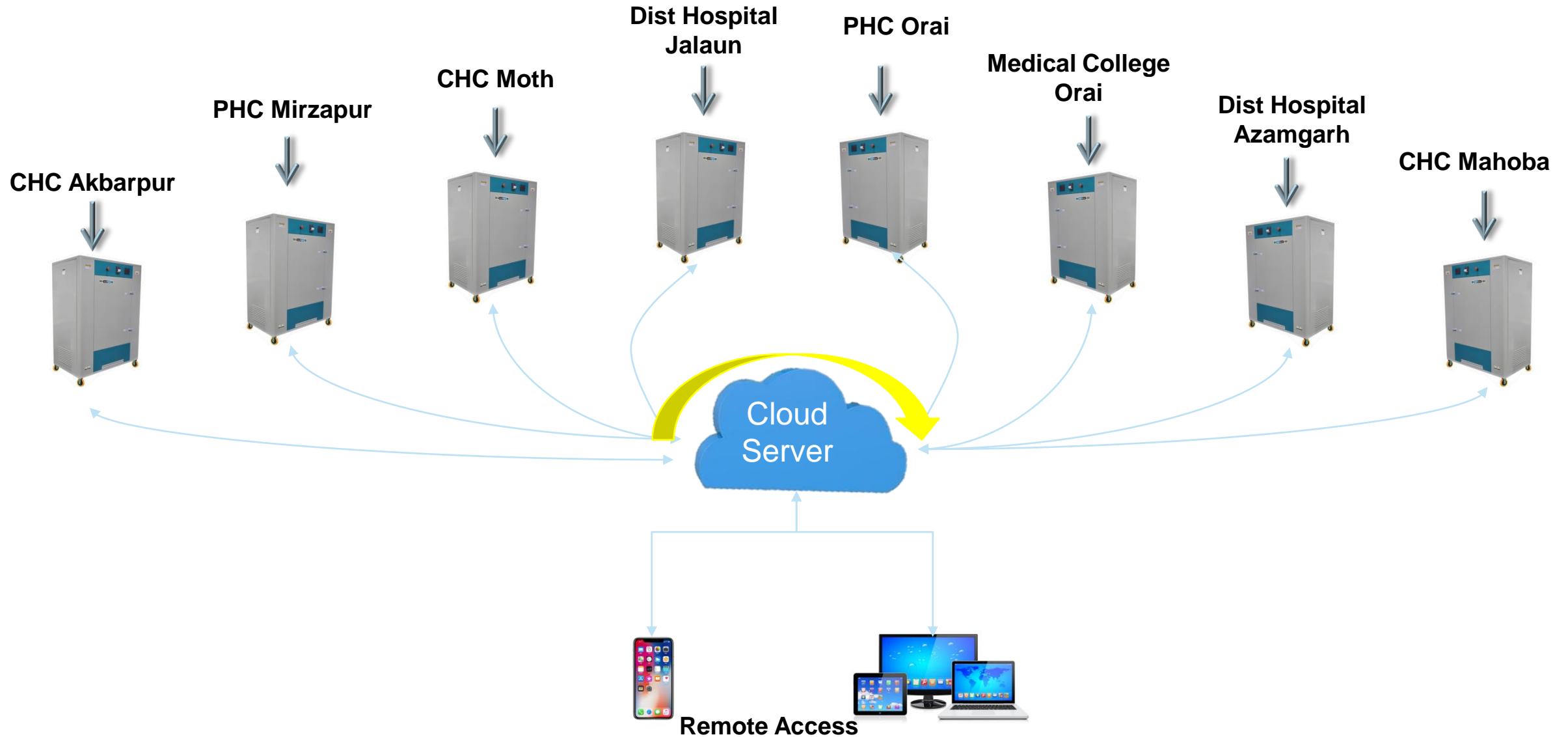
Data intentionally or unintentionally **prone to manipulation**

Inaccurate Analysis or back tracing

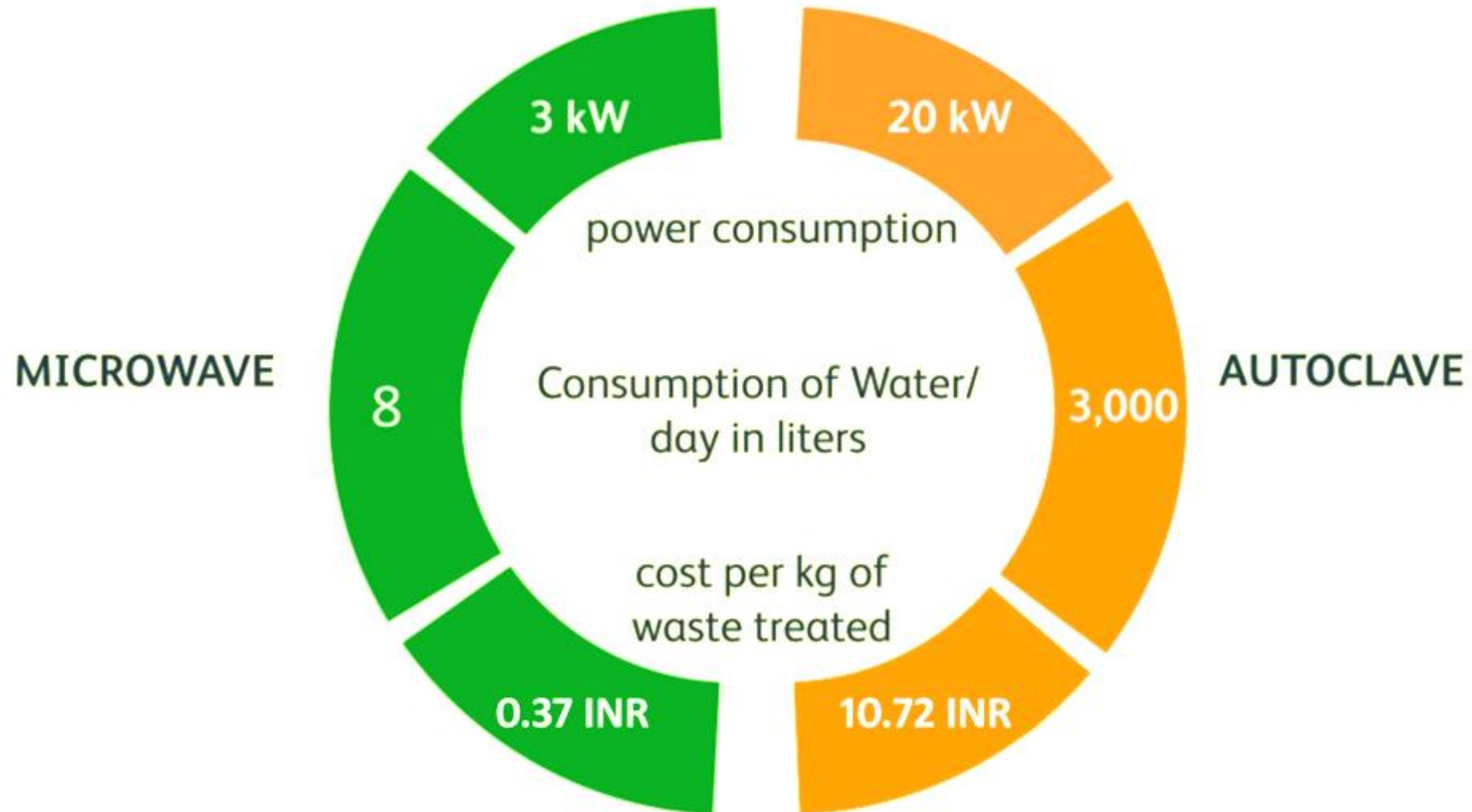
No functionality to maintain 5 years data

Increase in **time consumption, wastage of resources and no traceability** or incident reporting

WHAT IS IOT ENABLING?



OPTIMASER VS AUTOCLAVE



BENEFITS OF IOT ENABLING



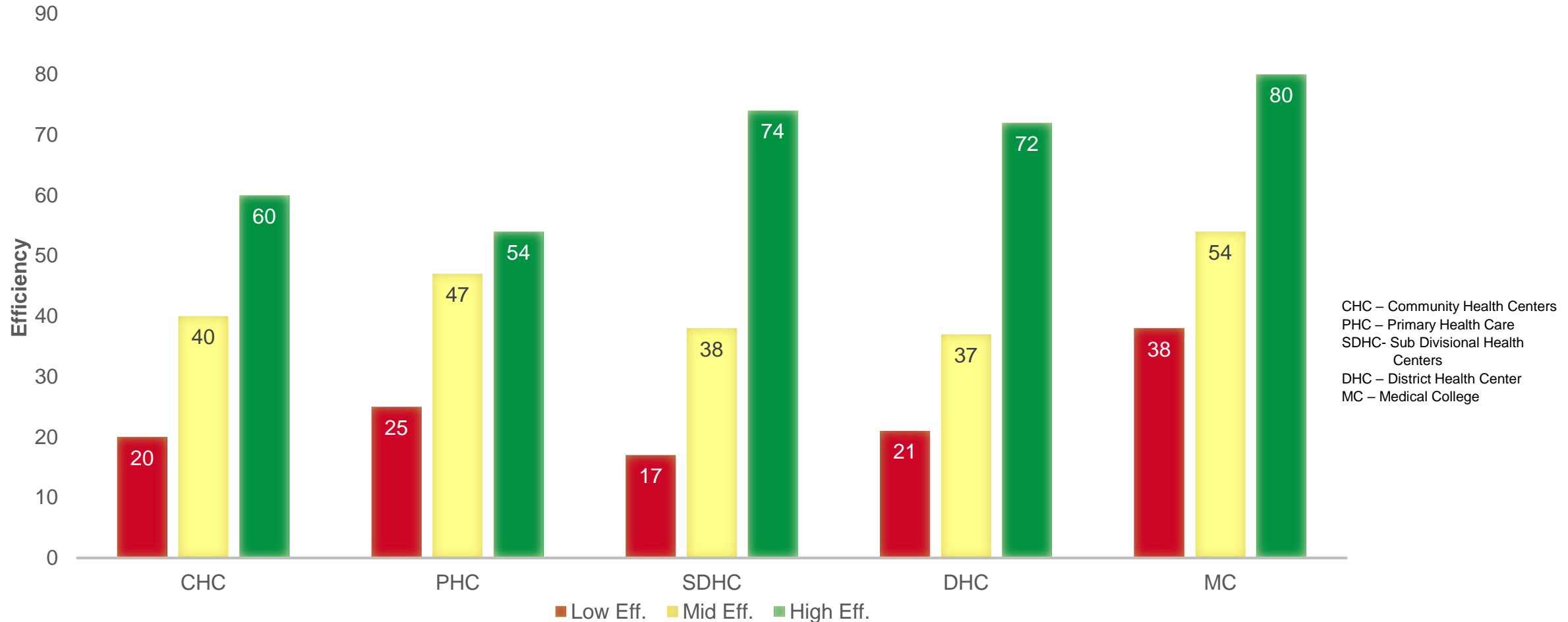
- High Sustainability
- High Real Time HAI Audit
- High App based Efficiency
- High Equipment UP Time as App controlled
- High Patient throughput as Low HAI
- High control of Nosocomial and hospital acquired infection



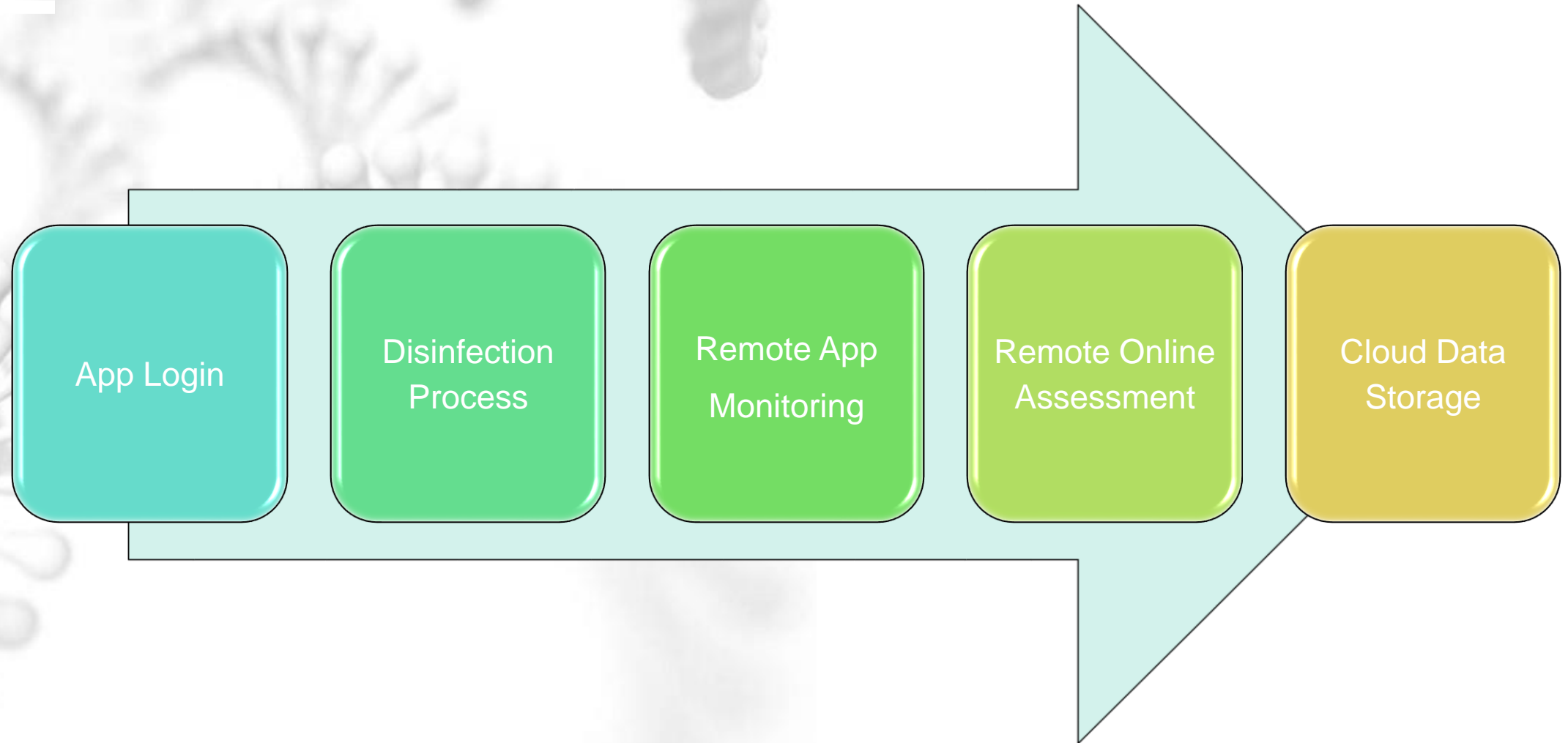
- Low cost of Operation
- Low HAI
- Low AMR
- Low Patient Prescription Cost
- Low Nosocomial Infection
- Low Morbidity

TYPICAL IOT DASHBOARD ON YOUR SCREEN (LAPTOP/MOBILE)

ACCESS to functionality data will aid ASSESSMENT of machine performance.



IOT PROCESS FLOW





OptiMaser 10
(15 Litre/Cycle)



OptiMaser 30
(45 Litre/Cycle)



OptiMaser 60
(75 Litre/Cycle)

A point of generation treatment of bio-medical hazardous waste for 360 degree infection and epidemic control.



MACS Microwave Assisted
Cold Sterilization

10% OF AUTOCLAVING
COST PER KG!!!

14 MACS
TECHNOLOGY
SCIENTIFIC PAPERS

PATENTED
PRODUCT

150⁺ INSTALLATIONS
IN SE ASIA

100% IN ALL AIIMS
PAN INDIA

10 LOG SUPER
STERILIZATION

OUR CLIENTELE



All India Institute of
Medical Sciences



Border Security Force
Hospitals



E.S.I.C. Hospitals
(PAN India)



D.G. Armed Forces
Medical Supplies



BMISCL
Patna



Central Reserve Police
Force



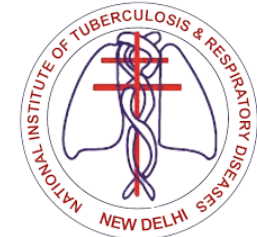
N.T.P.C.
Hospitals



Apollo Hospitals



Manipal Group of
Hospitals



National Institute of TB &
Respiratory Diseases



Indian Railways



New Delhi Municipal
Corporation



RIMS Imphal



Sahstra Seema Bal
Assam

OUR CERTIFICATION, AFFILIATION, VALIDATION & STANDARDS

Certifications

- EU CE (4 DIGIT) C E
- WHO-GMP
- DSIR ; R&D EXCELLENCE
- ISO 14001-2015
- ISO 9001-2015
- EN 13485
- OHSAS 18001-2007
- SGS
- SHRIRAM & NSIC LABORATORIES

Product Validation

- All AIIMS in India
- GTB Hospital, New Delhi
- SGPGI, Lucknow
- Govt. District Hospitals, Bengaluru
- Bharat Serums & Vaccines Ltd., Maharashtra
- Government Medical College, Haldwani
- Rukmani Devi Beni Prasad Jaipuria Hospital, Jaipur

Government Affiliation



GLOBAL “QUALITY STANDARDS” PRODUCT



OUR AWARDS AND RECOGNITION



7 PATENTS

7 patents have been jointly applied for different applications by CSIR-IITR & SSMED and are under process



NACO / GoI Approved

OptiMaser® is now NACO / GoI approved for Blood Bank, Bio-medical Waste and Tuberculosis vide certificate No. MHFW S.12015/3/2014-NACO (BS) 28/06 /018



CSIR-IITR Joint Venture

India's 1st Microwave Assisted Translational Research Program



Electronic Industries Association of India

ELCINA EFY 2016-17 Electronics Award for R&D by IAS Shri Ajay Prakash Sawhney Secretary, MeitY, Govt. of India for OptiMaser™



MACS - Microwave Assisted Cold Sterilization

Breakthrough Technology with Zero Environmental effect.



Govt. of India ToT Project

Award of Transfer of Technology for OptiMaser™ (Microwave Medical Waste Disinfection System) by Hon'ble Shri Ravi Shankar Prasad Minister, Dept. of Telecommunication & I.T., Govt. of India



DSIR Approved for In-house R&D

DSIR certified bearing Certification No. TU/V-RD/4350/2018 & declared a recognised Scientific & Industrial Research Centre for In-house R&D



Best Biomedical Waste Management Device

@ Conference on "Bio-Medical Waste Management: Issues, Challenges, Awareness & Opportunities" at ASSOCHAM-2018



Excellence in Innovation in the Medical Devices Sector in India

@ The Healthcare-Pharma & Medical Devices Summit & Excellence Awards
The awardees had been selected by group of eminent professionals from the Industry.



Healthcare Excellence Award

in Best Emerging Medical Equipment Company category through Hon'ble Minister Shri Shripad Yasso Naik MOS, Health & Family Welfare, Govt. of India



Gold Standards in Start-up Industry

Recognized as a start-up by the Department of Industrial Policy and Promotion (DIPP) vide Certificate No.: DIPP28600





Star Scientific Industry Award

Pt. Jawahar Lal Nehru, the Prime Minister of India in 1962 honored "Bhandari Scientific Stores" by awarding Star Scientific Industry Award

OUR PRESENCE



Hon'ble PM Tweets about Us

 Mann Ki Baat Updates मन की बात अपडेट्स  @mannkibaat

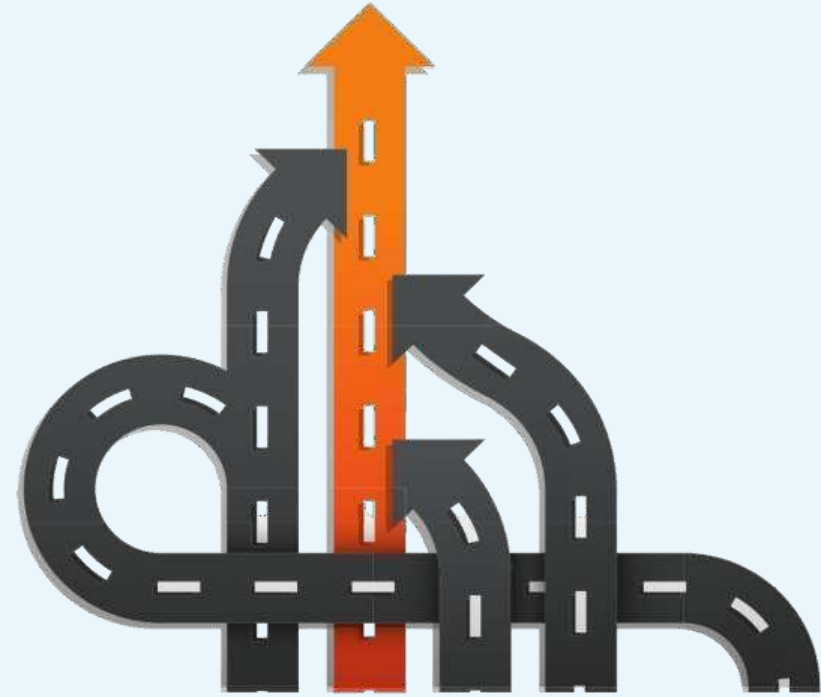
#IndiaFightsCorona

Lucknow: Indian Institute of Toxicology Research with a Major Technology start-up, develops disinfection machine for N95 masks & PPE kits.

Dated : 16th Jun 2020 14:24

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GOLDEN PROMISE



**No matter which road you're on,
We'll get you where you need to go.**

Right for Today

Right for Tomorrow





Everything
is possible