# Telemedicine Society of India Maha. Chapter & MGM UHS



Interactive, Practical & useful Academic session





# CME —"Telemedicine —In Covid 19 Pandemic" Critical care & Peripheral connected devices in Post Covid 19 Management. Host- MGM UHS Navi Mumbai /Telemedicine Society of India -Mahartashtra TSI MH

- 1. Context setting-Introduction- Dr S.V.kulkarni. 5 mins . -5.05
- 2. Inauguration-At hands of Dr. Sudhir Kadam Ex.Vc-MGM UHS 5- min 5-15
- 3. Welcome address VC MGM UHS- Dr. Shashank D. Dalvi -05-min. 5-20
- 4. Guest Of Honour -API President -Dr. Kamalesh Tiwari-3 Mins
- 5. Guest of honour- Dean Indian college of Physicians- Dr.Rajesh Upadhuay -3 min-5-25
- 6. Presidential key note Adress TSI Col.Dr Ashvini Goel 20 minutes 5-30
- "Relevence of TM in Covid Pandemic"
- 7. "TM Need of hour An opportunity in Calamity" -Dr.BS Ratta 15min. 5.50
- Past President & Patron of TSI Maharashtra ,Ruby hall clinic ,Pune
- 8. "TM in ICU management -Our MGM Experience-"15 minutes- Dr.Sagar Sinha-6.05
- 9. "Connected devices In Telemedicine Post Covid "- Dr. SV Kulkarni 15 minutes with demo & inputs from Manish-.com, Mr.Ketan Apte Aptmedicalsystems.com-6.20 PM
- 10. Future of TM-QA- interactions -Summary ,audience participation 15-min 6.40
- 11. Vote of thanks Dr. G. S. Narshetty Dean, MGM-UHS Navi Mumbai -5minutes.

### Disclaimer

- <u>Declaration</u>: Nothing to declare in form of indirect or direct funding
- Source of Support: Nil
- Conflict of Interest: Nil
- Material: Apps displayed have been chosen by merit and are freely accessible to all
- <u>Choice</u>: Not endorsing any hardware or software solution
- <u>Education</u>: Please do not take photos or notes, copies can be provided at request
- Sharing: Feel free to share, do acknowledge us!



### Why do we need technology?

1. Quick: One-click

2. Data sorting: Easy-planning

3. Pace: Repetitive jobs faster

4. 'Ct all': Poly-pharmacy era

5. Ease: Minimal learning curve

6. Empowerment: Allied healthcare staff

7. Systematic: Own rules of war for work

8. Leisure: Learn at your own time

9. Opportunity: Learn from Gen-Ex

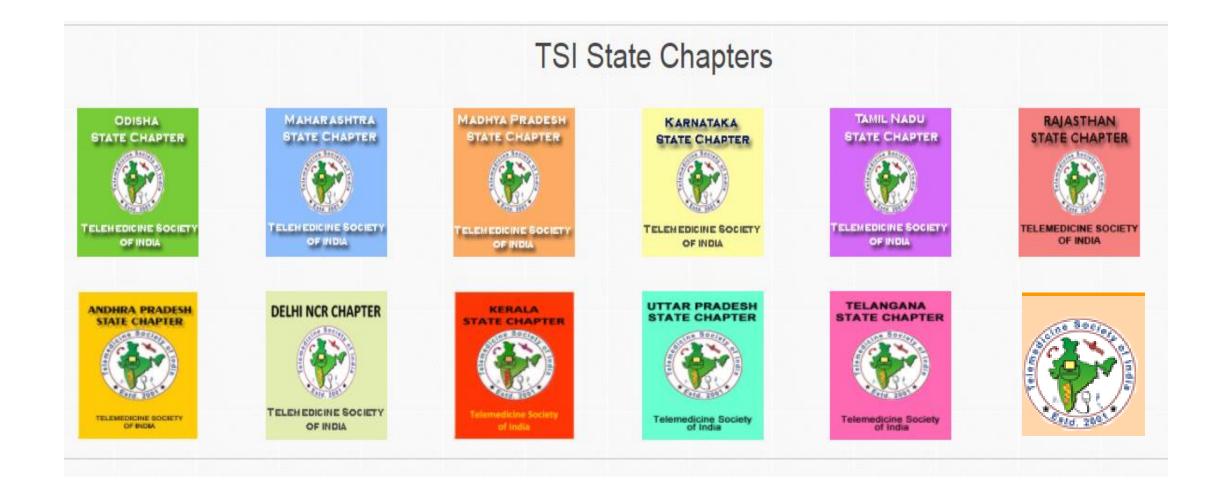
10. Future: The world is yours

### The New Normal Boon-intra & Post Covid

"TELEMEDICINE PROVIDES
HEALTHCARE WHERE THERE IS
NONE AND
IMPROVES THE HEALTH CARE
WHERE THERE IS SOME"

# TSI –Use & adopt Technology -https://tsi.org.in/pdf/Membership.pdf,

Join Telemedicine Society of India https://tsi.org.in





### MGM INSTITUTE OF HEALTH SCIENCES

(DEEMED UNIVERSITY u/s of 3 UGC Act, 1956) Accredited by NAAC with "A" Grade

#### Dr. Sudhir Kadam Ex VC



### Dr. Shashank Dalvi VC MGM UHS



### Guests of Honor- From API & ICP

**Dr.Kamalesh Tewary – President API** 

Dr.Rajesh Upadhyay Dean ICP





CV Dr.Ashvini goel – Introduced by Dr.B.S.Ratta



### **Curriculum Vitae**

#### DR. BHAGWANT SINGH RATTA

M.B.B.S., M.S. General Surgery, Dip. Paediatric Surgery, London, F.I.C.S., F.A.I.S, Dept. of Paediatric Surgery, Ruby Hall Clinic, Pune.

- Dr. B.S. Ratta is a trained Paediatric Surgeon/ Urologist from KEM, Mumbai, and Great Ormond Street Children's Hospital, London.
- He did his Fellowship from Institute of Child Health, London and Texas Children's Hospital, Houston, U.S.A.
- He did his Endoscopic training in Hong Kong and Germany.
- He has worked in Africa and Middle East.
- •He is currently practicing in Ruby Hall Clinic, Pune since the last 30 years.
- •His field of specialty is Endoscopic, Reconstructive and Robotic Urology in children.
- He has many publications in peer reviewed International Journals.
- •He has been active in the field of Telemedicine for the past 15 years and organized various International meets and Telemedicons .
- He is Past President of TSI, IAeHC, Rotary CLUB
- He is a Trustee with Connecting a suicide Prevention NGO and Director of a Healthtech Company.
- •E-mail bsratta05@gmail.com
- •Phone +91 9822078715



### **Dr Sagar Sinha**

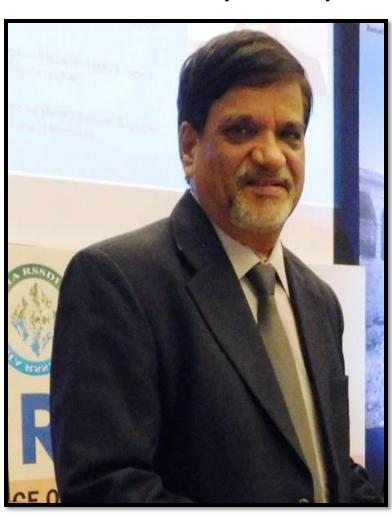
#### **Consultant Intensivist & Physician**

MBBS, MD (General Medicine), DNB (General Medicine), FNB (Critical Care), EDIC (European Diploma in Intensive Care)

- MGMIHS, Navi Mumbai
  - Head, Critical Care Unit & Assistant Professor, Emergency Medicine, MGM Medical College
  - Institute COVID Task Force: In-charge, COVID ICU & HDU
  - Clinical Administration: Chapter Head (Hospital NABH Committee), Secretary (Code Blue/CPR Committee)
  - Institutional Committee (Member): Board of Studies (Nursing), Scientific Advisory Committee (Biomedical)
- Chief Intensivist: MGM Hospital & Research Centre, CBD Belapur, Navi Mumbai
- Teaching Experience: 9 years
- Academic Output: 111 works
  - 19 publications: 3 international, 7 national, 8 chapters, 1 book (as editor)
  - 35 collaborative presentations: 15 Posters & 20 Papers (4 as presenting author)
  - <u>57 faculty appearances</u> at conferences (3 international, 33 national & 21 regional)
- 8 Awards: 2 MBBS distinctions, 2 personal at conferences, 1 at institute level, 3 for collaborative works
- Professional
  - ICU Committee member: Zonal Transplant Coordination Centre, Mumbai
  - Jt. Treasurer & EC member: *Physicians Association of Navi Mumbai*
  - Trainer: AHA Instructor, Mechanical Ventilation, Technology in Medicine

Mobile: +91-9372277267 Email: drsagarsinha@gmail.com

## Dr.S.V.Kulkarni M.D-Med.,FICP,FACP,FDI-Navi Mumbai



- MBBS, MD Miraj,1982
- Practicing last 37 years
- Faculty in GMC Miraj, DYPMC Nerul,
- MGMUHS, ITM-
- Ex Member of Indian College of Physicians-ICP, API G Body
- Org. Sec. of MAPCON 2002, 2019 and APICON 2007 at Goa.
- Pioneer in Medical-IT & smartphone technology

### Post Covid 19 –Common questions for all

- Am I Improving ?
- Are my Vitals OK
- How I can recognize at it earliest
- How I can connect with my
- Care Giver & Doctor.
- Without too much of Search Travel, waiting , in time frame.
- Can I combine all together





#### Glucometer attachment for Smartphone







#### AliveCor Kardia Mobile 6L EKG



### Doubts Unlimited & In series.!-Indian Set Up

- Is the equipment standard.
- How to use it
- Any Demonstration video ?
- Technical support
- Maintainance
- Recurrent Cost-batteries ?
- Guaranty-warranty
- Replacement with better version

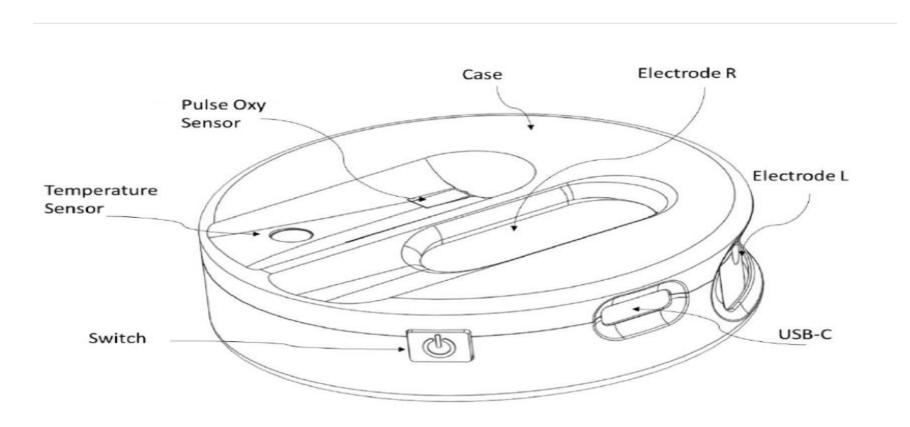


## Heart Health Right at Your Fingertips-Avidhrt





AvidHRT is a Bluetooth Low Energy enabled device which measures EKG, Pulse Oximetry and Skin Temperature. AvidHRT has low power requirements, it is small (cylindrical with 53 mm diameter, 20 mm height) and low-cost device. It consists device (the main control unit) and three sensors EKG, pulse oximetry and skin temperature measurement (Figure 1).





# The handheld A

The handheld AI driven heart monitor capable of Single Lead ECG, Pulse Oximetry and Infrared Skin Temperature Monitoring.

**Avidhrt Sense** 

Readings recorded are shareable with physicians.



Solution

ECG Arrhythmia
Detection



Hypoxia Detection



Temperature Monitor



Connects with any Device



Record, Track, Store and Share







AFib can be episodic, making it difficult to detect with short term monitoring or at a doctor's office



80%

80% of strokes related to AFib are preventable if detected early





Every 4 minutes someone dies of a stroke in the US

### The Arrhythmia

# Atrial Fibrillation (AFib)

- The leading cardiac arrhythmia in the elderly
- Post Open Heart Surgery rate = 30%
- Post Ablation recurrence as high as 50%



The incidence of AFib increases sharply after 65 years and more than 10% of patients over 85 years have clinical AFib

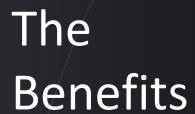


Blood clots are the most common cause of stroke – Atrial Fibrillation (AFib) increases this risk 5X



AFib costs Americans \$33 billion each year







Monitor your heart – confirm normal rhythm or detect AFib anytime, anywhere



Affordable – Avidhrt is the least expensive device of its kind on the market



Easy to use – no wires, patches or gels just hold the device in your hand and you're ready to go



Enhanced accuracy, heart rate and rhythm are confirmed by monitoring two data feeds – EKG and Pulse Oximetry



Get a second opinion through the Avidhrt partner network



# wrizto HEALIHEARE O D HEALIHEARE

### FitKit – Overview

Vision is to simplify Personal Healthcare Management







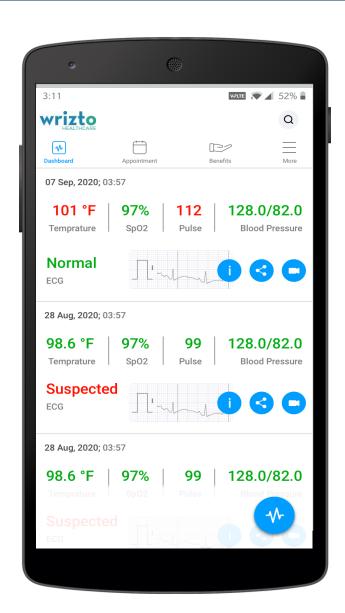


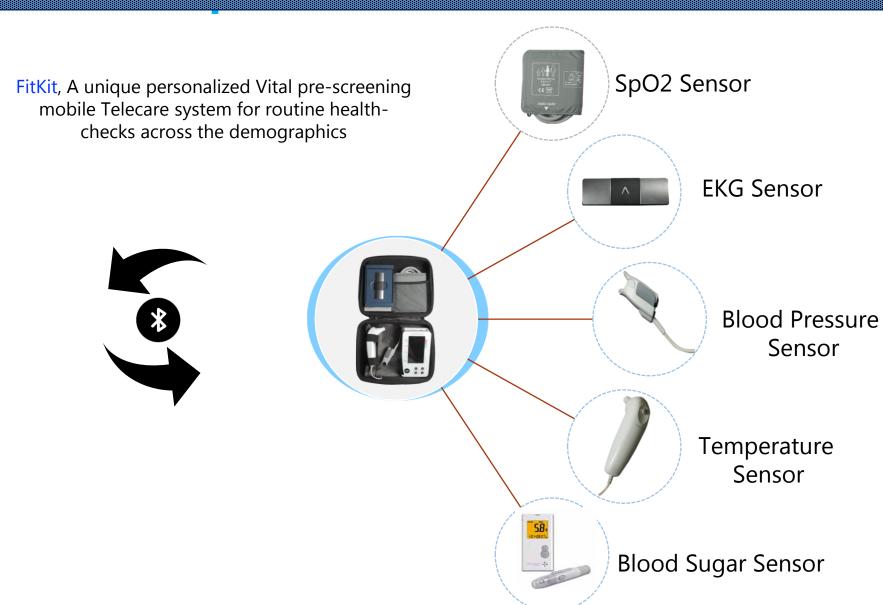




### FitKit Personalizao Health Management: Overview

Wrizto Confidential





### FitKit Parsonalizad Health Management: Ecosystem

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### **End User**

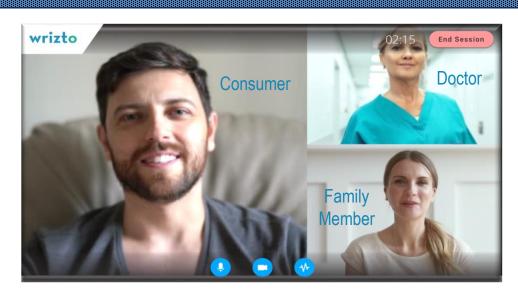
Mobile App (Android) —
Appt, Video Consultation —
Record share, Emergency —
Health Record & history —

Wrizto Cloud (Care-Continuum Ecosystem)



### Dr & Admin

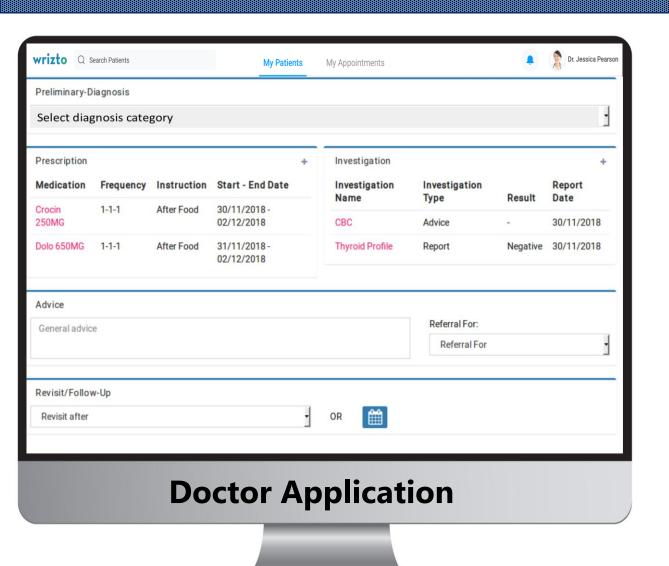
- Web App (Browser)
- Registration, Appt
- Video Consultation
- ☐ Billing & MIS

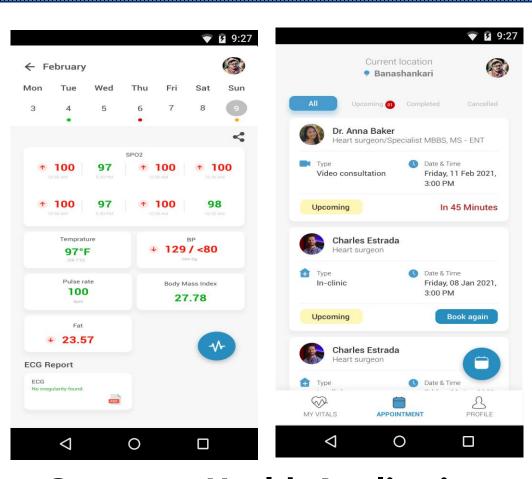


rizto	Q Search Patients				My Patients	My Appointments					Dr. Jessica Pear		
	My Patients												
	Patient Name	Age	Sex	Blood Group	Phone Number	Temp	Sp02	Pulse	BP	ECG	Video Call		
	Willie Zaine	27	М	0+ve	+1 202 555 0121	101.0 °F ↑	90% →	123 🛧	123.0/85.0 ->	•		MORE	
	Angela Aames	33	F	AB+	+1 202 555 0113	98.2 °F→	97% →	111 🛧	128.0/82.0 ->	•		MORE	
	Jake Abel	50	М	B+	+1-202 555 0169	100.2 °F ↑	95% →	89 →	132.0/85.0 ->	•		MORE	
	Dorothy Abbott	48	F	0-ve	+1 202 555 0171	97.8 °F →	80% ↓	95 →	172.0/116.0 ->	•		MORE	
	Heather Clark	33	F	AB+	+1 202 555 0113	98.2 °F→	59% ↓	100 →	136.0/98.0 →	•		MORE	
	Victor Pacheco	50	М	B+	+1-202 555 0169	98.0 °F→	90% →	92 →	127.0/81.0 <del>→</del>	•		MORE	
	Jaclynn Bradley	48	F	0-ve	+1 202 555 0171	99.2 °F→	90% →	97 →	136.0/82.0 →	•		MORE	

### FitKit Personalized Healthcare | Doctor - Consumer connectivity

Wrizto Confidential





**Consumer Health Application** 

### Fit (it Personalized Healthcare II Features & Benefits

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## Personal-Vital Device



Personalized Vital Kit

- + FDA/CE Approved
- + Multiple vital capture
- + Threshold alerts

And more..

### Patient-Health Assistant





Personal Health Profile

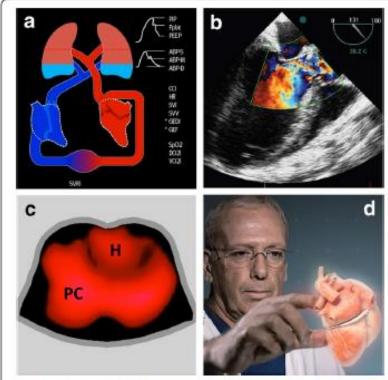
- + Medicine, Visit Alert
- + Vital Trends, Video
- + Disease Discovery

And more..

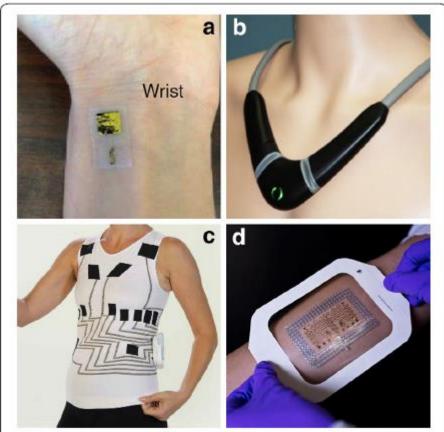
# Thank you-QA-VoT

# Wrizto, Trusted Healthcare Ecosystem of Choice

reach@wrizto.com | +91-876-243-8721



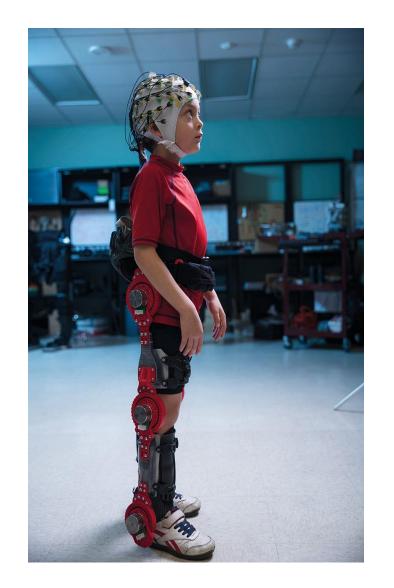
**Fig. 2** Examples of bedside digital methods useful to "look" at the cardiopulmonary circulation. **a** Graphical display, HemoSight screen from Mindray with permission; **b** echocardiography Doppler, **c** electrical impedance tomography, *H* heart, *PC* pulmonary circulation, from Dixtal with permission; **d** digital holography, downloaded from Realviewimaging.com



**Fig. 5** Examples of wearable and wireless sensors. **a** Wireless patch measuring radial blood pressure, from [34] with permission; **b** necklace estimating thoracic fluid content, downloaded from Tosense. com; **c** T-shirt recording 12 leads ECG, downloaded from Personal-healthwatch.com; **d** electronic tattoo, downloaded from engr.utexas. edu

### **Future is 3 Dimensional, Haptics**





# Digital Twinning & Personalised Medicine



# Be Optimistic, Informed, Empowered, Futuristic, Build a Bridge of Knowledge-technology.



## Be a part of Technology Evolution in Medicine



### **Telemedicine Society of India (TSI)**

(Recognized under Societies Registration Act, 1860)

#### MEMBERSHIP REGISTRATION FORM

Name: Mr./Ms./Mrs./Dr./Pr	of./M/s.		
Father / Spouse Name	:		
Qualification Date of Birth or	:		Gender :
Date of Formation of Company	:	$\frac{1}{(DD-MM-YYYY)}$	(Male / Female)  Contact Person:  Designation: