



## IMIA Telehealth WG23 2021 Report

### **Arindam Basu, Co-Chair (2019-2022)**

Associate Professor, Education, Health & Human Development  
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### **Sriram Iyengar, Co-Chair (2019 - 2022)**

College of Medicine,  
University of Texas  
USA

**Website:** <https://imia-medinfo.org/wp/telehealth/>

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## 1. Achievements – IMIA WG Events and projects conducted, and publications completed

Basu A, Kuziemy C, de Araújo Novaes M, Kleber A, Sales F, Al-Shorbaji N, Flórez-Arango JF, Gogia SB, Ho K, Hunter I, et al. [Telehealth and the COVID-19 Pandemic: International Perspectives and a Health Systems Framework for Telehealth Implementation to Support Critical Response](#) Yearbook of medical informatics 30(1):126-133 01 Aug 2021 (Journal Article)

Gudi N, Konapur R, **John O**, Sarbadhikari S, Landry M. Telemedicine supported strengthening of primary care in WHO South East Asia region: lessons from the COVID-19 pandemic experiences. BMJ Innovations. 2021 May 19:bmjinnov-2021.

Gummidi B, **John O**, Jha V. Continuum of care for non-communicable diseases during COVID-19 pandemic in rural India: A mixed methods study. Journal of Family Medicine and Primary Care. 2020 Dec;9(12):6012.

Bhandari SS, Joseph SJ, **Udayasankaran JG**, Konthoujam B, Shoib S, Dutta S. Telepsychiatry: A feasible means to bridge the demand–supply gaps in mental health services during and after the COVID-19 pandemic: Preliminary experiences from Sikkim state of India. Indian J Psychol Med. 2020;42(5):500–502. Available from <https://journals.sagepub.com/doi/full/10.1177/0253717620951282>

Haranath SP, **Udayasankaran JG**. Tele-intensive care unit networks: A viable means

for augmenting critical care capacity in India for the COVID pandemic and beyond. *Apollo Med* 2020;17:209-16. Available from <https://www.apollomedicine.org/article.asp?issn=0976-0016;year=2020;volume=17;issue=3;spage=209;epage=216;aulast=Haranath>

Rains SA, Crane TE, **Iyengar S**, Merchant N, Oxnam M, Sprinkle MM, Ernst KC. Community-Level Health Promotion during a Pandemic: Key Considerations for Health Communication. *Health Communication*. 2020 Dec 5;35(14):1747-9.

**Higa, C.**, Davidson, E. J., & Loos, J. R. (2021). Integrating family and friend support, information technology, and diabetes education in community-centric diabetes self-management. *Journal of the American Medical Informatics Association*. <https://doi.org/10.1093/jamia/ocaa223>

**Higa, C.**, Krupinski, E. A., Birkmre-Peters, D., & Labasan, S. (10%) (2021). Challenges and opportunities to advancing telehealth: US telehealth resource centers' approach. In *Telehealth Innovations in Remote Healthcare Services Delivery: Global Telehealth 2020*. <https://doi.org/10.3233/SHTI210024>

Day, K; **Hunter, I**; Rao, V; Russell, G; Roskvist, R; Moir, F; Gill, E; van der Werf, B. Survey protocol for exploring video and phone use in Aotearoa New Zealand general practice: Considerations for future telehealth. *BMJ Health & Care Informatics* 2021;28:e100309. doi: 10.1136/bmjhci-2020-100309

Whiddett, R., **Hunter, I.**, Elers, P., Lockhart, C., Guesgen, H., & Singh, A. (2021). New and Emerging Issues for Technologies to Support Older Adults to Age in Place: Findings From a Workshop of Experts. *International Journal of Applied Research on Public Health Management*, 6(1), 1.

Meijer W.J., Taylor A. ISO/IEC-standards on quality and safety of telehealth services and mobile medical apps. In press, *MedInfo 2021*

Taylor A. Healthcare Technology in Context. Lessons for Telehealth in the Age of COVID-19, Palgrave McMillan 2021

Alhuwail D., ..., N. Al-Shorbaji and others. Middle East and North African Health Informatics Association (MENAHA): Strengthening health informatics ecosystems in the Region and Beyond. A chapter in IMIA Yearbook 2020. (April 2020), (DOI: 10.1055/s-0040-1701968). <https://www.thieme-connect.de/products/ejournals/pdf/10.1055/s-0040-1701968.pdf>

Craig E. ..., N. Al-Shorbaji and others. Ethics in Telehealth: Comparison between Guidelines and Practice-based Experience -the Case for Learning Health Systems. A paper in A chapter in IMIA Yearbook 2020. (April 2020) DOI: 10.1055/s-0040-1701976 <https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0040-1701976.pdf>

Koch, S., ... N. Al-Shorbaji. Digital Health during COVID-19: Informatics Dialogue with the World Health Organization. Yearbook of Medical Informatics, 2021 Apr 21. doi: 10.1055/s-0041-1726480 <https://pubmed.ncbi.nlm.nih.gov/33882596/>

Tara, M., ... N. Al-Shorbaji. Middle East and North African Health Informatics Association (MENAHA): Health Informatics Response to COVID-19 Crisis. Yearbook of Medical Informatics, 2021 Apr 21. DOI: 10.1055/s-0041-1726496 <https://www.thieme->

**2. Describe WG/SIG Participation - Engagement and participation in IMIA, IMIA Region or member health informatics events and activities in the past year**

We ran online meetings over Zoom to coordinate the group activities

Policy Panel during Telemedicon 2021, official conference of the telemedicine society of India. "Telehealth Standards towards strengthening healthcare delivery system & Building Resilience moderated by Dr Oommen John, India

**3. Provide details of the WG/SIG's Outreach - Recruitment and engagement of new members and target communities, publicity, and representation at major events and/or on social media.**

(Arindam Basu)

- Delivered a keynote address to the Annual Brazilian Telemedicine Conference
- Led a research project at the University of Canterbury on how primary care physicians (General Practitioners), Nurses, Midwives, and Allied Health Professionals such as Speech Therapy Specialists in New Zealand used Telehealth during the first phase of pandemic when New Zealand went into lockdown. The results are now being analysed and papers are planned to be published

(Inga Hunter)

- Led a research project funded by Vensa Health and supported by the New Zealand Telehealth Forum on adults aged 55+ years living in rural communities in New Zealand and how they think telehealth could be used to improve their access to care. Funder report delivered. Public publications underway. Numerous presentations given to DHB and other stakeholders. Reports to participants written and disseminated.
- Co-led a research project with University of Auckland on the use of telehealth by general practice and patients since the first NZ lockdown, The results are being analysed and publication planned. One paper published on project methodology.
- Co-leading a research project with University of Auckland and Pharmacy Managers at the NZ Ministry of Health exploring the use of telehealth by community pharmacists - data collection in progress
- Leading a research project with the New Zealand Telehealth Forum that will take a stocktake of telehealth readiness/use in District Health Boards. Under development.
- Completed research project on the use of the New Zealand Covid tracer app - journal article published.
- Involved in research project on Maaori governance and telehealth - data collection in progress

(Vije Rajput)

- Fashioning change in healthcare: the adoption and assimilation of technology. Presentation and publication (Sydney)
- Post COVID-19: Is digital the future of primary care? Presentation at the primary

- care specialist group of the British Computer Society
- Presentation at the pHealth 2021 International Conference on wearable, micro & nano technologies for personalised health. Communicating about mortality in health decision support.
- Research proposal on a digital tool to support decision making
- As clinical director participating in digital implementations to support care including online consultations, prescribing decision support and the use of wireless stethoscopes.

(Oommen John)

- Hosted a series of policy roundtable consultations on telehealth & virtual care for patients with chronic conditions covering  
User Centered Virtual Care – Voice of Users  
Telehealth for Strengthening Health Services Delivery  
Creating an enabling environment for a sustainable telehealth ecosystem  
Safe, Effective & Comprehensive Use of Telemedicine
- Research grant funding for scoping review on telehealth health supported strengthening of primary health services delivery in south east asia region from WHO South East Asia Regional Office.
- Received grant funding for telehealth supported COVID-19 response in Andhra Pradesh India, from Give2Asia
- Received grant funding from UNICEF for identifying health innovations to provide remote psychosocial support to frontline health professionals.
- Presented on India's telehealth journey during American Telehealth Association Conference 2021
- Presented on telehealth from continuum of care for NCDs in India during the high level BRICS digital health summit 2021.
- Co led the grant application for strengthening the telehealth implementation among vulnerable populations under the Australia India Strategic Funding Scheme 2021.

(Kendall Ho)

- Established a new Digital Emergency Medicine Committee in the Canadian Association of Emergency Physicians (CAEP), Canada's national emergency medicine organization
- Participated as a member of the International Federation of Emergency Medicine (IFEM) New and Advanced Technologies Special Interest Group (NATSIG), and co-organized and co-moderated a virtual care/digital health track of speakers at the International Conference of Emergency Medicine in Dubai in May 2021.
- Participated in establishing a real time virtual support network in the province of British Columbia, Canada with a range of virtual care services for peer-to-peer and direct-to-patient support since April 2020 (<https://rccbc.ca/rtvs/>)
- Established a provincial virtual physician service to work with provincial 8-1-1 nursing service to support BC citizens in addressing their urgent health information and health service navigation.  
(<https://www.cmajopen.ca/content/9/2/E635>)

(Christina Higa)

- Managed the Pacific Basin Telehealth Resource Center, University of Hawaii at Manoa, funded by the U.S. Health Resources and Services Administration that provides telehealth technical assistance to the State of Hawaii and U.S. Affiliated Pacific Islands ([www.PBTRC.org](http://www.PBTRC.org)).
- Led a telehealth capacity development and planning initiative with nine community health centers with the Pacific Island Primary Care Association.

- Developed with the University of Hawaii John A. Burns School of Medicine and University of Hawaii School of Nursing and Dental Hygiene, telehealth curriculum including video vignettes for Interprofessional Education.

(Jai Ganesh Udayasankaran)

- Contributed to the development of tele-triage module in 'Train to Practice Telemedicine' Certificate Course from Telemedicine Society of India. ( <https://tsi.org.in/courses/> )
- Contributed in the compilation and publication of 'Telemedicine Practice Guidelines: Frequently Asked Questions for Registered Medical Practitioners' an e-book brought out by the Telemedicine Society of India.
- Led a team of experts from India to draft use cases on tele-pathology, tele-radiology, tele-intensive care, tele-audiology, tele-rehabilitation that were included as part of 'Annex B Using quality planning guidelines in real world telehealth services' in ISO 13131:2021 Health informatics — Telehealth services — Quality planning guidelines. ( <https://www.iso.org/standard/75962.html> )
- Contributed to the Telehealth Toolkit published by American Health Information Management Association (AHIMA) ( <https://my.ahima.org/store/product?id=66639> )
- Presented on practice guidelines, implementation and regulatory aspects of telemedicine/telehealth at the following events:
  - AeHIN Webinar Series for Cambodia, Laos, Myanmar, Vietnam (CLMV), October 21, 2020
  - AeHIN-IPPF-WHO Regional Dialogue on Digital Health in Sexual and Reproductive Health and Rights (SRHR), November 19, 2020
  - National Conference on Digital Health Transformation, Hanoi, The Socialist Republic of Vietnam, December 29, 2020
  - M.D.IGITAL 2021: National Telehealth Convention 'The Role of Medical Students in the Global Digital Health Strategy 2020-2025' Philippines, April 24, 2021
  - Roundtable Discussion, Chamber of Deputies, Parliament of Romania, June 9, 2021
  - World Health Summit Regional Meeting Africa, Kampala, Uganda, June 29, 2021
- Delivered a guest lecture on 'Telemedicine: A Health Information Management Perspective' for students from Manipal College of Health Professions (MCHP), Manipal Academy of Higher Education (MAHE), India, September, 15, 2021
- Co-authored a paper 'Effectiveness of HIS-integrated tele-consultation helpline during the Covid pandemic: Implementation and clinical impact from a volunteer organization's perspective' accepted for oral presentation at TELEMEDICON 2021, November 14, 2021

Craig Kuziemsky

- Contributed to paper on informatics approaches to COVID-19 on behalf of the Telehealth WG.
- Member of a panel at MIE 2021 on ethical principles for informatics tools
- Has been working on a cross-Canada survey of telehealth applications used during the pandemic to inform future telehealth design.
- Delivered a kSESBASS 2021 [SESBASS - Home \(weebly.com\)](https://www.sesbass.com) on health systems transformation

Wouter Meijer

- Written a paper (Alan Taylor as co-author) on the consistency of ISO/IEC-standards on quality and safety of telehealth services and mobile medical apps

- that has been accepted for publication and is in press in MedInfo 2021
- Given a presentation on ISO/IC-standards quality and safety of telehealth services and mobile medical apps at MedInfo 2021
  - Initiated and coordinated (in collaboration with Alan Taylor) a programme of IMIA Telehealth Working Group to provide guidance on telehealth and standards
  - Led a project at Saxion University of Applied Sciences on quality assurance of telehealth services and telehealth devices in the framework of standards for medical devices
  - Conducted a pilot study on the quality assurance and documentation of developing a telehealth device for treatment and prevention of obesity and for early detection of diabetic ketoacidosis
  - Contributed to the writing of ISO 13131:2021 Health informatics — Telehealth services — Quality planning guidelines ( <https://www.iso.org/standard/75962.html> ) collaborating with the editor, Alan Taylor

Najeeb Al-Shorbaji

4. Jointly authored a number of papers cited in the publications above;
5. A speaker at a number of online conferences on the changing nature of the rule of ICT in health during the current pandemic;
6. Jointly conducted a study in Jordan on healthcare delivery during the pandemic and the extensive use of telehealth services in the primary health care centres in Jordan.

Gumindu Kulatunga

- Incorporating Telehealth practices in to the National Digital Health Standards & Guidelines of Sri Lanka
- Contributing to the development of publication on regulation of telemedicine practices of Sri Lanka.
- Design and development of Teleradiology innovation laboratory for the Faculty of Medicine, University of Colombo with collaboration of industry partners.
- Piloting and testing of remote monitoring facilities for continuation care for patients with NCD.
- Sri Lankan representation in the panel discussion on Telehealth Standards towards Strengthening healthcare delivery system & Building resilience at 17th international Conference of Telemedicine Society of India 2021.

Prasad Ranatunga

- Design and development of Teleradiology innovation laboratory for the Faculty of Medicine, University of Colombo with collaboration of industry partners.
- Piloting and testing of remote monitoring facilities for continuation care for patients with NCD.

**4. Current List of members:**

Current roster (as of 15th November, 2021), ordered in Email address entry

Name
Abhishek
Alan Taylor

Alvin Marcelo
Amadeus Campos
Anandhi Ramachandran
Anil Kuthiala
Anis Fuad
Anthony Maeder
Aonuoha
Arindam Basu
Arjun Kalyanpur
Ashok Tripathi
Ashvini Goel
Atila the SZC
ATP 2133
Jai Ganesh Udayasankaran
AVI 33 TBTT
Booncha Kijisanayotinn from Thailand
Brenda Anne Faye
Brigitte Seroussi
Carol Hullin
Christina Higa
Christoph Lehmann
Doctor Gupta
Chris Pearce
Rajeev
Sanjay Bedi
E Devel
Elaine Huesing
Emilia N Olpz
Fernando Plazzotta
Fernando Sales
Farhad Fatehi
Filipe Silva
Gaj Jag

GCAAOS
Dr S B Gogia
GS Jaiya
Gumindu Kulatunga
Gunnar Hartvigsen
Heimar
Helen YW APAMI
Humberto Fernand Mandirola Brieux
Emmett Huang
Inga Hunter
CEO IMIA
Anupama Ginige
JAAGM
Jose
KD Shrivastav
Kendall Ho
KG 2678
Michio Kimura
Klaus Veil
Kleber S Araujo
Konstantin Chebotaev
Kriti Gogia
Craig Kuziemyky
K Waite
S Lavanian
Livia Bellina
Iro
Luis Tromso
Magdala de Araujo Novaes
Mahnaz Samadbeik
Marcia Ito
Maurice Mars
Mowafah



Sriram Iyengar
Nobles Math Magic
P Abbott
Pramod Jacob
PEKB Ranatunga
R Sabbatini
Sushi Meher
Sabine Koch
Sheila John
Najeeb Al-Shorbaji
Sonata Skazka
Sriram 94107
Stony Net
Vignesh Subbian
Oommen John
Thanga S
TS 13131 Revision
USM Bish
Vajira HWD
Vije Rajput
VSL AIIMS
Vuma Magaqa
Wouter Meijer
Yogesh Ank
Yogi Kanagasingam

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