

TEMDEC & OVEX

International Medical Department,
Kyushu University Hospital

Annual Report 2022

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Dear friends and colleagues,

It gives us great pleasure to present to you the 2022 annual report of Telemedicine Development Center of Asia (TEMDEC) & Overseas Exchange Center (OVEX) at Kyushu University Hospital. In this issue, we report on the activities of both the TEMDEC and the OVEX. These two organizations have worked together for many years, with the TEMDEC in charge of remote medical education and the OVEX in charge of human exchange. We are proud to share with you the progress this combined effort has made in providing high-quality medical education through telemedicine and human exchange.

While the last few years have been challenging for all of us, we remain committed to our mission of delivering excellence in medical education despite the many obstacles presented by the pandemic. In 2022, we were finally able to resume human exchange programs. Effective and sustainable medical education can now be conducted through a combination of in-person and online training. As the world gradually begins to resemble how it was before the pandemic, we will pay keen attention to medical education activities.

We would like to extend our gratitude to our friends, colleagues, and stakeholders for the continued, unwavering support shown to us, which has been critical in making our activities a success.





As you may have already noticed, this booklet is more compactly arranged than our previous reports; we hope you enjoy the abridged and condensed format.

Thank you again for your support and we look forward to an enduring working relationship with you.

Sincerely,




Tomohiko Moriyama, M.D., Ph.D./ Associate Professor
Director, Telemedicine Development Center of Asia
Vice Director, Overseas Exchange Center
Vice Director, International Medical Department
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 <p>International Medical Department, Kyushu University Hospital</p>	Overseas Exchange Center	<p>Human Exchange</p> <p>Human Resource Development</p> 
	Telemedicine Development Center of Asia	<p>Remote Education</p> <p>Developing Technologies</p> 
	International Patient Support Center	<p>International Patient Services</p> <p>Translation for Patients</p> 

May 5 Technical Support for the Live Demonstration at the 3rd World Congress of GI Endoscopy (ENDO 2022)

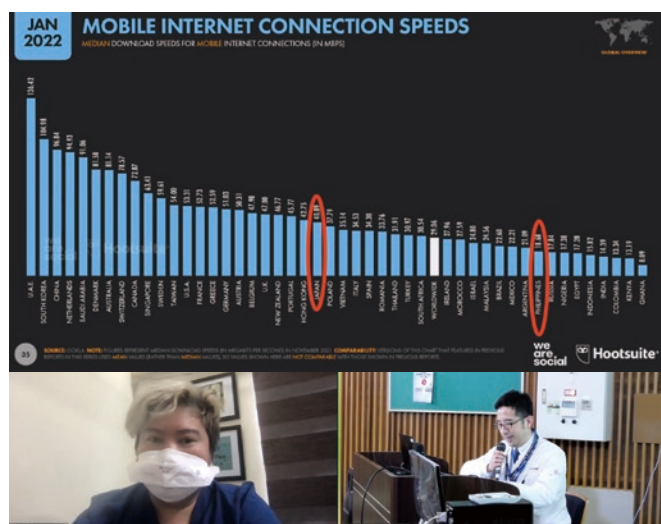
At the ENDO 2022, six sessions were chaired by eminent international faculty with 17 live discussion and interaction with experts at each of the following venues: Asian Institute of Gastroenterology, Asan Medical Center, and Chinese PLA General Hospital. The video cases with live discussion were presented from highly renowned Japanese institutions, including the Japanese Red Cross Kyoto Daini Hospital, and Kobe University.

<https://worldendo2022.org/>



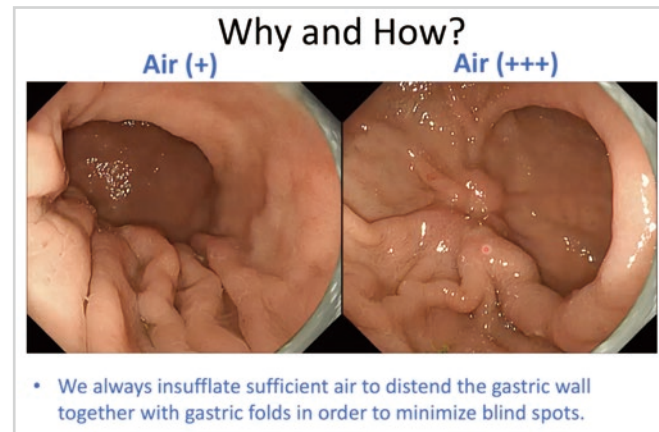
May 5 The 15th Student Lecture

Although this class was set as a hybrid style, all medical students joined online. Dr. Vittoria Vanessa Velasquez from St. Luke's medical center, the Philippines presented the trial of online education for medical students, followed by a discussion between her and some students in Kyushu University Hospital. The status of international remote medical education and remote patient care in Japan was also introduced from Director Tomohiko Moriyama. There was a lot of positive feedbacks from the students.



Sep. 9 The 2nd Endoscopy Train-the-Trainer Program for Laos

HIGAN, a Non-Profit Organization started hands-on training with Japanese endoscopist for doctors in Bhutan and Laos aiming to train the skill of early gastric cancer detection. Since they cannot travel abroad and carry out in person training due to COVID-19 pandemic, they trained online with the support of TEMDEC.



Sep. 9 Teleconsultation with China

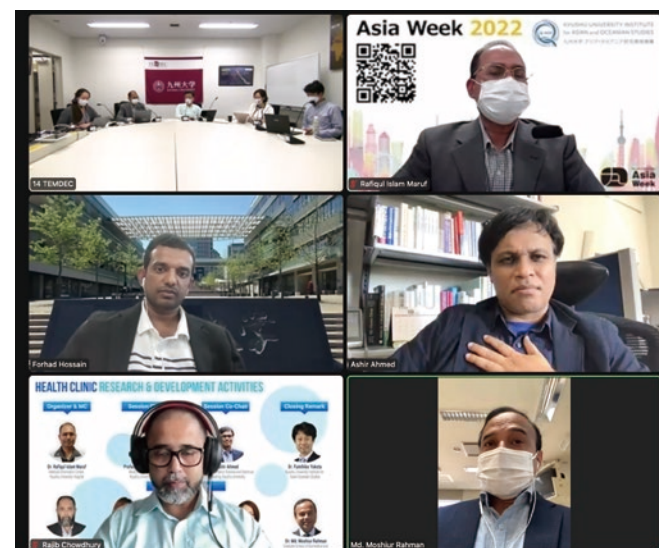
This year, three fee-based teleconsultations were held with China. From Kyushu University Hospital, cardiologist, neurosurgeon, and otolaryngologist joined and connected with Second Xiangya Hospital of Central South University, China.



Nov. 11 Technical Support in Kyushu University Asia Week

Kyushu University has held Asia Week since 2020. This year, Kyushu University Institute for Asian and Oceanian Studies (Q-AOS) hosted this event, under the main theme, "Kyushu University Open to Asia and Connecting with Asia". TEMDEC organized a special seminar, "the 2nd Medicine x Design Collaboration Seminar: The Future Opened Up by the Collaboration of Medicine and Design/Art", and gave technical support to other programs.

<https://asiaweek.kyushu-u.ac.jp/en>



Nov. 11 The 23rd Congress of Japanese Society of Oral Care

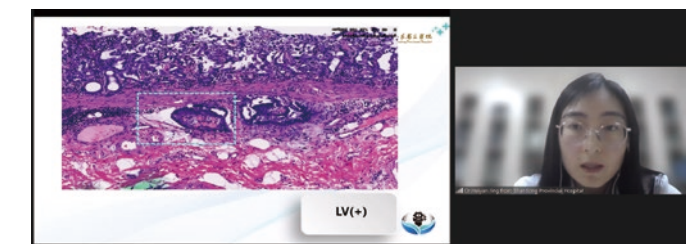
The theme of this academic conference was "Oral Care in the New Normal Era". Special lectures introduced advanced medical-dental collaborative medical models and specific oral care initiatives. In the symposium, experts of feeding and swallowing rehabilitation and oral health care during disasters introduced practical examples of team medicine, and participants engaged in meaningful discussions. In the preparation for this event, two Mongolian engineers joined for training.

<https://sites.google.com/view/oralcare23th>



Dec. 12 The 37th Peking Early Gastric Cancer Teleconference (PUMCH)

Peking Early Gastric Cancer Teleconference (PUMCH), started in 2007, and marked the 37th meeting. Endoscopists and pathologists from both of Japan and China participated and discussed many clinical cases.



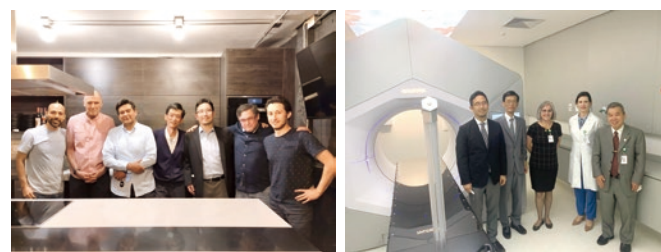
Dec. 12 Student Lecture from the Republic of the Sudan

A remote lecture from Sudan to Kyushu University medical students was given by Dr. Naoyuki Kawahara from Rocinantes, an authorized NPO. It was a great opportunity to learn about the current state of Sudan's medical care and life and to think about the future of medicine. Many students actively asked questions. Due to the efforts of TEMDEC, the lecture between Africa and Japan was smooth.



Dec. 12 Business Trip to Chile and Brazil

Director Tomohiko Moriyama visited Chile and gave presentations at Chilean Congress of Gastroenterology. He also visited Santa Cruz Japan Hospital in Sao Paulo and joined a WASHOKU conference. The conference was in a hybrid format connecting many institutions in Latin America and Kyushu University. We hope to continue our collaboration in Medicine and WASHOKU.



Business Trip to Kyrgyzstan

Dr. Moriyama was invited to lecture at a conference on gastrointestinal endoscopy in Bishkek, Kyrgyzstan. And he made a live demonstration as an endoscopic master class. During the demonstration, Kyrgyz State Medical Academy and Avicenna Hospital were connected online.

Dec. 12 Vice Director Kuriko Kudo's Interview

Ms. Kudo, vice director of TEMDEC won the Encouragement Prize at the poster session of KYUSHU UNIVERSITY VISION 2030 Kick-off Symposium. She was interviewed and it was published in Kyushu University PR magazine.

https://www.kyushu-u.ac.jp/f/50928/kyudaikoho126_web.pdf



Feb. 2 Acceptance of Trainees in the Sakura Science Program and Conducting VR Endoscopy Demonstrations

Nine telemedicine engineers from 6 countries (Bhutan, India, Indonesia, Malaysia, Nepal, and Vietnam) joined our "Sakura Science Program".

Live demonstration using the 360-degree camera from the endoscopy room was conducted. During the demonstration, participants used VR goggles to enjoy the realistic 360-degree images via YouTube or a dedicated application. This was the first live demonstration using the 360-degree camera at Kyushu University Hospital. Many doctors, nurses, and others enjoyed this demo, which raised expectations for future development.



Feb. 2 Indonesian Neuroimmunology Case Teleconference

Japanese neurologists from Kyushu University Hospital and Kochi University Hospital, and Indonesian neurologists participated in the 33rd Indonesian neuroimmunology case teleconference. They discussed the diagnosis and management of a patient presenting headache, gradual visual loss, and spinal cord lesions. This was a step forward in identifying the cause of the case.



Feb. 2 Hospital Visit in Colombia, Costa Rica, and Mexico

This business trip was for a wrap-up of Grants-in-Aid for Scientific Research (A) "Remote medical education for the early diagnosis of gastric cancer in Latin America" (PI: Prof. Shuji Shimizu, former Director of TEMDEC, CoP: Dr. Moriyama, and Ms. Kudo.). We visited University Javeriana Bogota, JICA Colombia branch, and La Sabana University in Colombia. Gastro Clinica and Rafael Angel Calderon Guardia Hospital in Costa Rica, and the National Institute of Medical Sciences and Nutrition in Mexico. We exchanged various medical information and discussed further collaboration.



Feb. 2 Meeting for Globalization of Japanese National University Hospitals

A total of 112 representatives from Japanese National University Hospitals joined in this hybrid meeting to promote internationalization. Topics included reports on the most recent survey of various initiatives, introduction from two universities that have recently established new section of International Medicine, and action plans for implementation of future vision. The event ended successfully with discussions and sharing best practices. Kyushu University Hospital reported on newly created Facebook page of NUHC Japan Council for Internationalization.



Mar. 3 The 55th Asia-Pacific Advanced Network (APAN 55) in Nepal

A total of 7 online sessions were held. Throughout the conference, 33 presentations from 11 countries were delivered, with a total of 372 participants from 15 countries, 46 of whom attended on site. For the first time in three years for the Medical Working Group, the event saw a return to pre-pandemic scenes, where questions from the audience were answered online. Participants were able to experience the joy of re-engaging in communication that blended both face-to-face and online interactions.



Mar. 3 The 16th Asia Telemedicine Symposium (ATS) in Nepal

The theme was "Role of Nurses in Telemedicine", and featured reports and lively discussions on regional healthcare initiatives utilizing the latest communication technologies from doctors and engineers across Asia, North America, and Central America. Based on the conference, a telemedicine declaration draft for Nepal was created and is scheduled to be submitted to the Ministry of Health, Nepal. We are delighted to have been able to contribute to the development of standards in the host country through this event.



Mar. 3 The 6th Internationalization Forum at Maidashi campus of Kyushu University

On March 23, each department in the medical area (Graduate School of Medicine, School of Health Sciences, Graduate School of Dentistry, Graduate School of Pharmaceutical Sciences, and Hospital) presented the current status and issues of international exchange. Special lectures were given by Dr. Naoyuki Kawahara of the NPO Rocinantes on regional medicine in Africa and Prof. Masa Higo of the International Student Center of Kyushu University on Health Challenges in Hyper-Aged Asia. It was a good opportunity to exchange information for the promotion of internationalization in the medical field.



Medicine x Design Project

https://www.temdec.med.kyushu-u.ac.jp/eng/research/medical_design.html

Collaboration with General Surgery and Neurology in 2022

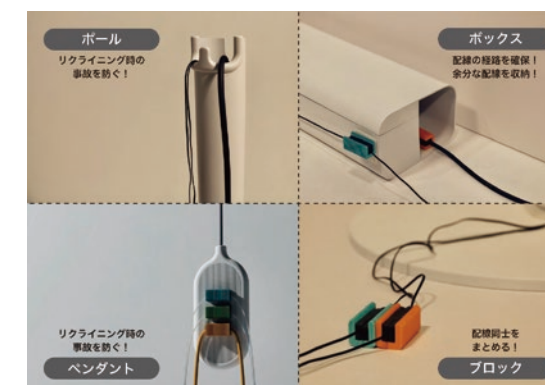
From 2021, we are proceeding a problem-solving educational program with the collaboration between the Graduate School of Design, the Graduate School of Medical Sciences and the Hospital at Kyushu University.

Medicine x Design Practice Class

In 2022, 14 master students from the Graduate School of Design, 4 doctoral students, researchers from the Graduate School of Medicine and the Hospital in the fields of general surgery and neurology participated to the project. Issues regarding patients with abdominal stoma (general surgery) and intractable neurological diseases (neurology) were identified as themes, and hospital tours and workshops were conducted. In total, 131 issues and 69 ideas were created for patients with abdominal stoma and 75 issues and 101 ideas for neurology patients. Finally, participants created prototypes of six ideas and validated with patients and experts, including "Information design for patients with abdominal stoma", and "Product for solving wiring problems of hospitalized patients".



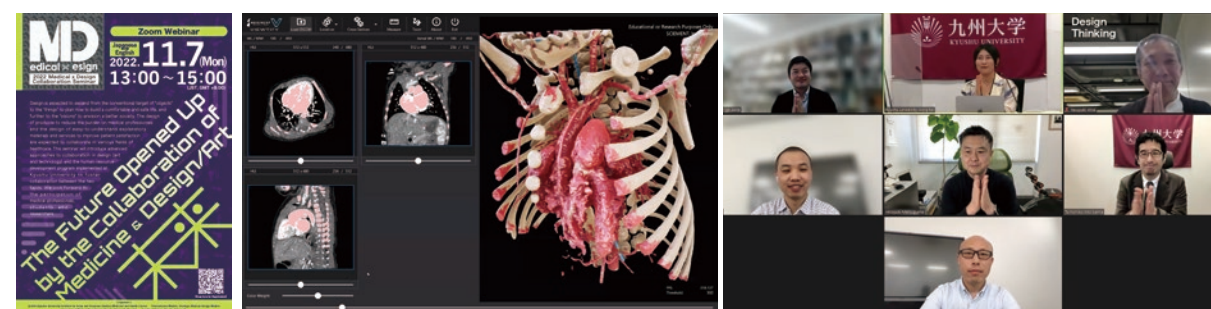
Information design for patients with abdominal stoma



Product for solving wiring problems of hospitalized patients

Medicine x Design Collaboration Seminar

We invited Dr. Hirofumi Seo from SCIEMENT, Inc to give a special lecture on real-time 3DCG in medicine. We also welcomed Prof. Zilong Li from Hunan University to give an educational lecture on medical product design. Afterward, the participants had a valuable opportunity to discuss future collaboration between medicine and design.



Medicine x Design Collaboration Seminar

Projects for the Growth of Medical Technologies in Mongolia

The project submitted by our hospital, titled "Human Resource Development for Gastrointestinal Diseases in Mongolia" has been selected as one of the initiatives under the Project for Growth of Medical Technologies by the National Center for Global Health and Medicine, Japan (NCGM). In the fiscal year 2022, we conducted hands-on training in endoscopy and surgery in Kyushu University Hospital and Ulaanbaatar, as well as regular remote medical education, to foster leaders in gastrointestinal treatment.

Japan-Mongolia Webinar

A total of 150 doctors from Mongolia participated in the 4 medical webinars held throughout the project. In the first and second seminars, endoscopists and surgeons from Kyushu University Hospital conducted lectures on early-stage gastric cancer with lively questions exchanged. The third Mongolian webinar featured presentations by Mongolian trainees on their training experience in Japan. The fourth webinar included a lecture on the collaboration between endoscopists and surgeons, as well as case studies involving a pathologist from Kyushu University Hospital, allowing for in-depth discussions on diagnosis and treatment points.

Laparoscopic Surgery Live Demonstration

The Kyushu University Hospital medical team visited Mongolia to know the medical situation in Mongolia. The team conducted hands-on training at the Mongolia-Japan Hospital. A case initially planned for open total gastrectomy was changed to laparoscopic partial gastrectomy after the medical team discussion. As the first laparoscopic gastrectomy in Mongolia, it gained much attention and was broadcast online from the operation room. About 80 Mongolian doctors observed the procedure, showcasing the benefits of intraoperative endoscopy, and the surgery was successful. The visit highlighted the importance of collaborative approach to GI diseases for Mongolia.



Training for Mongolian Doctors & Engineers

Five doctors (endoscopists and surgeons) and two telemedicine engineers from the Mongolian National University of Medical Sciences and the Mongolia-Japan Hospital were invited to Kyushu University Hospital for a one-month training program. They learned advanced techniques in their respective fields and shared their determination to implement these skills in Mongolia.



Research Projects with External Funds

◆Grants-in-Aid for Scientific Research (A): 2016-2022 JP16H0277

Remote medical education for the early diagnosis of gastric cancer in Latin America

Shuji Shimizu (Tomohiko Moriyama) (Kuriko Kudo)

◆Grants-in-Aid for Scientific Research (C): 2020-2022 JP20K10321

Sustainable international medical education for decreasing mortality of colorectal cancer in Asia

Tomohiko Moriyama

◆Grants-in-Aid for Scientific Research (C): 2020-2022 JP20K03148

Development of Evaluation Indicators for Technical Training Program for International Telemedicine Conferencing in Asia

Kuriko Kudo

◆Grants-in-Aid for Scientific Research (C): 2022-2024 JP22K02858

Establishment of image quality standards for the worldwide spread of refined early gastric cancer diagnosis using magnifying endoscopes

Shintaro Ueda

◆Grants-in-Aid for Scientific Research (C): 2018-2022 JP18K09945

Development of international telemedicine program for early detection of pancreatic cancer in Asia

Akira Aso (Tomohiko Moriyama) (Kuriko Kudo)

◆Grant-in-Aid for Challenging Research (Exploratory) 2021-2023

International research on diverse work styles of healthcare professionals toward a sustainable healthcare system

Akiko Chisyaki (Kuriko Kudo)

◆SAKURA SCIENCE Exchange Program 2022

Train-the-Trainer program for telemedicine engineers in Asia

Shunta Tomimatsu

Research Projects with University Funds

◆Qdai-jump Research Program: 2020.10-2023.3

Development of educational programs by connecting medicine and design

Kuriko Kudo

◆Kyushu University Institute for Asian and Oceanian Studies (Q-AOS): 2019-

Improvement and equalization of overall medicine standards in Asia based on telemedicine education

Tomohiko Moriyama

◆Kyushu University Integrated Initiative for Designing Future Society

Healthcare Unit

Koichi Akashi (Tomohiko Moriyama) (Kuriko Kudo)

◆Japan International Cooperation Agency

Nikkei Community Training Program (General Scholarship) for FY 2022

Tomohiko Moriyama

◆The Japanese Foundation for Research and Promotion of Endoscopy, a public interest incorporated association

The Subsidy for Accepting Overseas Research Doctors for FY 2022

Taiki Moriyama

◆International Collaborative Research Program: Science and Technology Research Partnership for Sustainable Development (SATREPS): 2021-

The project for institutional capacity building for eliminating Helicobacter pylori related death

Yoshio Yamaoka (Tomohiko Moriyama)

◆2022 International Exchange Personnel Development Assistance, the Telecommunications Advancement Foundation

Train-the-Trainer program for telemedicine engineers of provincial universities in Indonesia

Shunta Tomimatsu

◆National Center of Global Health and Medicine, Japan (NCGM), Bureau of International Health Cooperation 2022

Human Resource Development for Gastrointestinal Diseases in Mongolia

Tomohiko Moriyama

◆2022 Clinical Research and Development Promotion Project

Establishing a decentralized clinical trial infrastructure with a standardized electronic worksheet as its core, from both systems and an operational perspective

Koji Todaka (Tomohiko Moriyama)



43 nations 380 institutions 176 events
141 new institutions

- | | | | |
|------------------------|----------------------|---------------------|----------------------|
| Endoscopy | Surgery | Transplantation | Dentistry |
| Neurology | Technology | Robot | Pediatrics |
| Oriental Medicine | Oncology | Psychiatry | Pancreas |
| Cardiology | Student | Intractable Disease | Genetics |
| Cardiovascular Surgery | Neurosurgery | Healthcare | Pharmacology |
| Ophthalmology | Otolaryngology | Nutrition | Traditional Medicine |
| Others (Medical) | Others (Non-Medical) | | |



	Country	Institution	People
Inbound	Country	16	
	Institution	25	
	People	32	Doctor 21 Engineer 11
Outbound	Country	9	
	Institution	29	
	People	26	Doctor 16 Nurse 1 Pharmacist 1 Speech pathologist 1 Engineer 3 Administrator 4



TEMDEC

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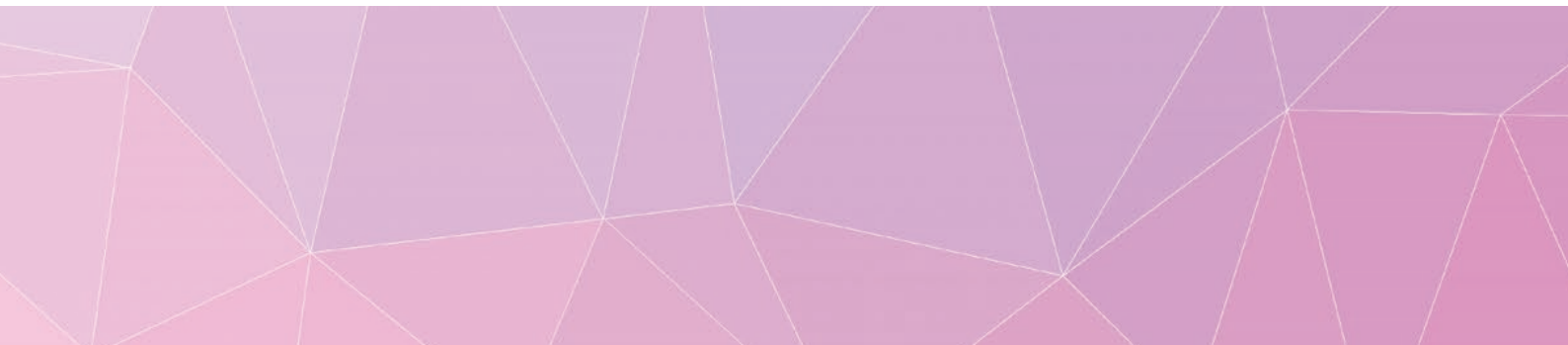
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