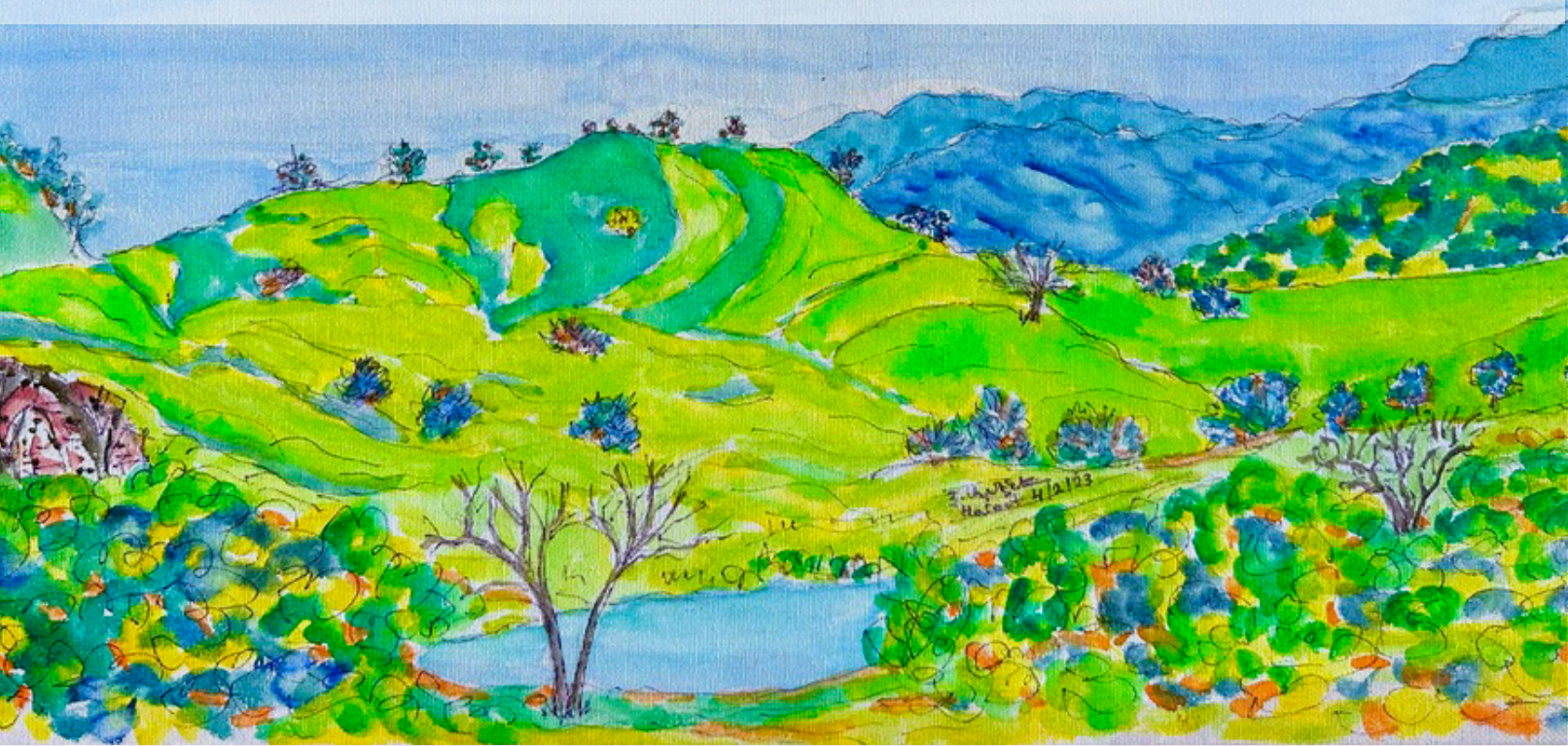


Avedisian Onanian Center for Health  
Services Research *and* Development

**“Entrepreneurs *in* Health”**  
*(EIH) Program*

2021-22 Biannual Report





## Introduction

In 2006, Gerald Turpanjian, renowned philanthropist, Trustee Emeritus and long-time benefactor of the American University of Armenia (AUA) donated \$5 million to the University to stimulate and promote rural economic development. The donation served as an impetus to establish the Turpanjian Rural Development Program (TRDP), which aimed at providing education and entrepreneurship opportunities to people living in the rural communities of the Republic of Armenia, Republic of Artsakh, and Samtskhe-Javakheti (Javakhk) region in the Republic of Georgia. To this date, TRDP has successfully trained 1,545 rural residents who have completed the entrepreneurship courses, of whom 549 have launched businesses and created 875 jobs.

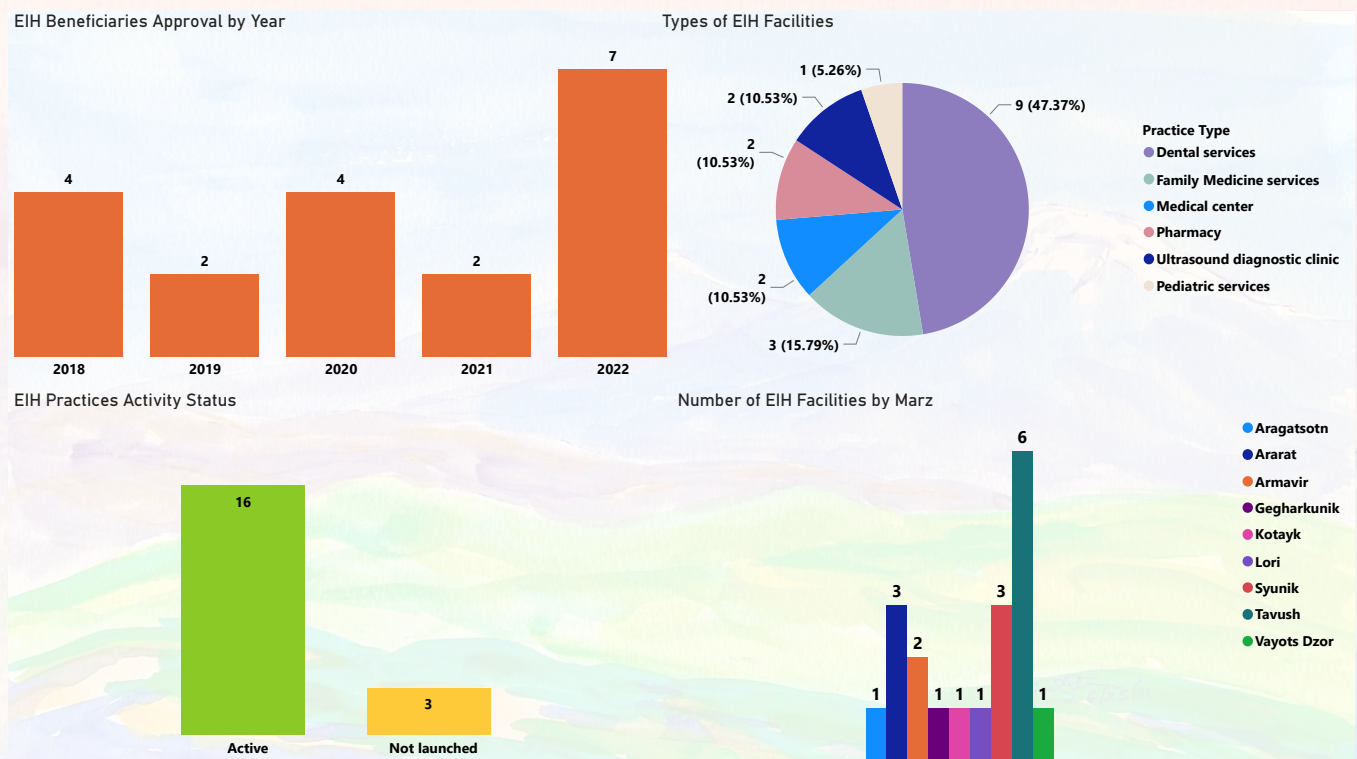
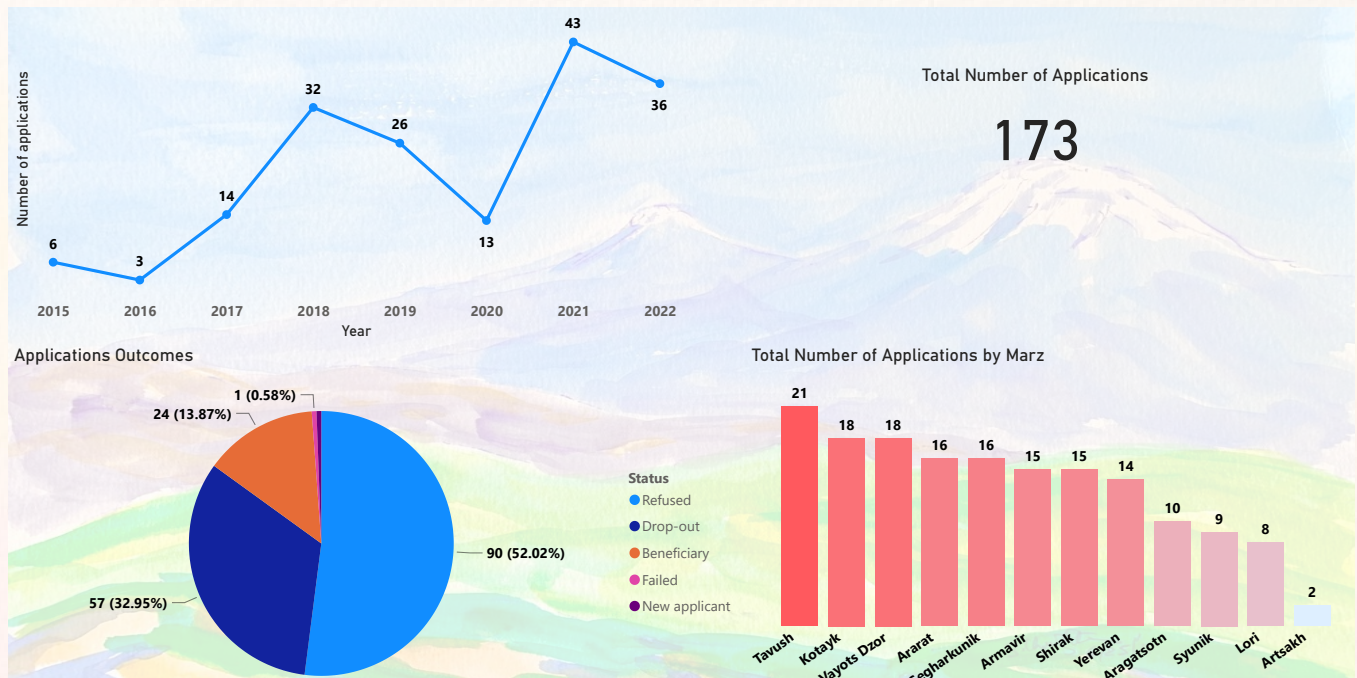
A decade later, the expressed interest of TRDP applicants and the growing need for local private practices in healthcare served as key drivers for establishing the Entrepreneurs in Health (EIH) program. EIH was launched by the AUA Turpanjian School of Public Health and aims to increase access to quality health services in the rural communities and regional small towns of Armenia, Artsakh, and Javakhk by supporting the establishment and/or expansion of private health practices.

### *The main components of the EIH program include:*

- Provision of free-of-charge education in healthcare quality assurance, entrepreneurship, accounting and preventive dentistry (for dentist beneficiaries)
- Arrangement for successful graduates to receive low interest (5%) loans from a local bank
- Continuous coaching and professional support
- Assistance in Continuous professional education
- Collaboration with diaspora professionals
- Monitoring and evaluation of established private practices
- Additional support to applicants from border communities
- Community-based Public Health projects

This report depicts the EIH program activities carried out in the years 2021 and 2022 and the key accomplishments that also reflect the successful entrepreneurship of program beneficiaries.

# 1. EIH Statistics at a Glance as of December 2022





## 2. EIH Educational Component

Within the year 2021, EIH program had two groups of applicants, who took the relevant “Entrepreneurship Skills” and “Healthcare accounting” courses followed by “Basics of Healthcare Quality Assurance Management” course.

The first group of applicants took their combined “Entrepreneurship Skills” and “Healthcare accounting” courses within the period Mar 23 to Jun 1, 2021. Eight participants were enrolled, 6 of them successfully completed the course and presented their Business Plans to the Committee of experts.



The presentations of Business Plans of the first group of applicants of 2021 to the Committee of Experts

The training in business and accounting was then followed by the “Basics of Healthcare Quality Assurance Management” course, which was held in the period Jun 29 to Aug 13, 2021 and provided 33 professional Development Credits (CPD) to its participants. Seven participants were enrolled, 6 of them successfully completed the course and presented their Quality Assurance Plans to the Committee of Experts.



The presentations of Quality Assurance Plans of the first group of applicants of 2021 to the Committee of Experts



The second group of applicants took their combined “Entrepreneurship Skills” and “Healthcare accounting” courses within the period Jul 3 to Aug 10, 2021. Six participants were enrolled, 4 of them successfully completed the course and presented their Business Plans to the Committee of experts.



The presentations of Business Plans of the second group of applicants of 2021 to the Committee of Experts

The second group of 2021 applicants took their “Basics of Healthcare Quality Assurance Management” course providing CPD credits in the period Dec 14, 2023 to February 4, 2022. Seven participants were enrolled, 4 of them successfully completed the course and presented their Quality Assurance Plans to the Committee of Experts.



Basics of Quality Assurance Management training with the second group of applicants of 2021

Following the internal assessment of the EIH program in January 2022, EIH restructured its educational component: The “Entrepreneurship Skills” and “Basics of Healthcare Quality Assurance Management” courses started to be organized simultaneously aiming to shorten the overall time spent on completing the educational component. Meanwhile, the “Healthcare accounting” course together with “Preventive dentistry” started to be elective



courses, available for its beneficiaries in case if they are interested in taking those. Another revision was related to the “Basics of Healthcare Quality Assurance Management” content, which increased the number of CPD credits to 44.

The EIH educational component with the first group of applicants in 2022 was held in the period Mar 22 to Jun 6, 2022, after which the participants presented their Business plans and quality assurance plans to the experts. Overall, 11 applicants were enrolled, and 8 of them successfully completed the combined courses.



EIH educational component with the first groups of applicants of 2022



The presentations of Business Plans of the first group of applicants of 2022 to the Committee of Experts.



The EIH educational component with the second group of applicants in 2022 was held in the period Sep 26 to Dec 16, 2022, after which the participants presented their Business plans and quality assurance plans to the experts. Overall, 10 applicants were enrolled, and 6 of them successfully completed the combined courses.



The presentations of Business Plans of the second group of applicants of 2022 to the Committee of Experts.



EIH educational component with the second group of applicants of 2022







## 4. EIH Open-to-public events

Within the period 2021-2022, EIH organized 7 scientific and educational events, aiming at contributing in continuous professional development of the health community of Armenia as well as raising awareness about the EIH program.

The events were concentrating on various directions, from research in clinical practice, the role of diaspora in healthcare of Armenia, quality of care and dietary guidelines to narrow professional dental lectures by EIH dentist mentor. The speakers of the events included Dr. Haroutune Armenian (AUA President Emeritus, EIH Chair), Dr. Shant Shekherdimian (Associate Professor and Pediatric Surgeon at University of California, Los Angeles), Dr. Vahe Kazandjian (Adjunct Professor, The Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD) and Dr. Kim Hekimian (Assistant Professor of Columbia University Institute of Human Nutrition).



EIH open-to-public events



## 5. EIH Research

### 5.1. EIH Preventive Dentistry Program

Following the establishment of previously unavailable pediatric services in Mrgashat village of Armavir region in 2022, EIH initiated the Preventive Dentistry Program in the community, which included oral hygiene awareness raising and caries-prevention among primary schoolchildren in Mrgashat.

To demonstrate the effectiveness of preventive dentistry program, the EIH researchers started an evaluation study, aiming:

- To evaluate the effectiveness of oral health awareness raising intervention in Mrgashat and Sardarapat communities and caries preventive intervention in Mrgashat community in improving DMFT/dmft scores among primary schoolchildren in the rural community through baseline and 2 years follow-up measurements of oral health status (DMFT/dmft scores) of primary schoolchildren and the self-reported oral health knowledge and behavior of their parents in both communities.
- To estimate the prevalence of plaque, as well as DMFT/dmft indices among primary schoolchildren in rural communities of Mrgashat and Sardarapat, Armenia.

To identify determinants associated with the presence and severity of plaque, as well as DMFT and dmft scores among primary schoolchildren in rural communities of Mrgashat and Sardarapat, Armenia.

The study utilized quasi-experimental nonequivalent intervention 1 - intervention 2 group design with two study waves conducted with an interval of two years.

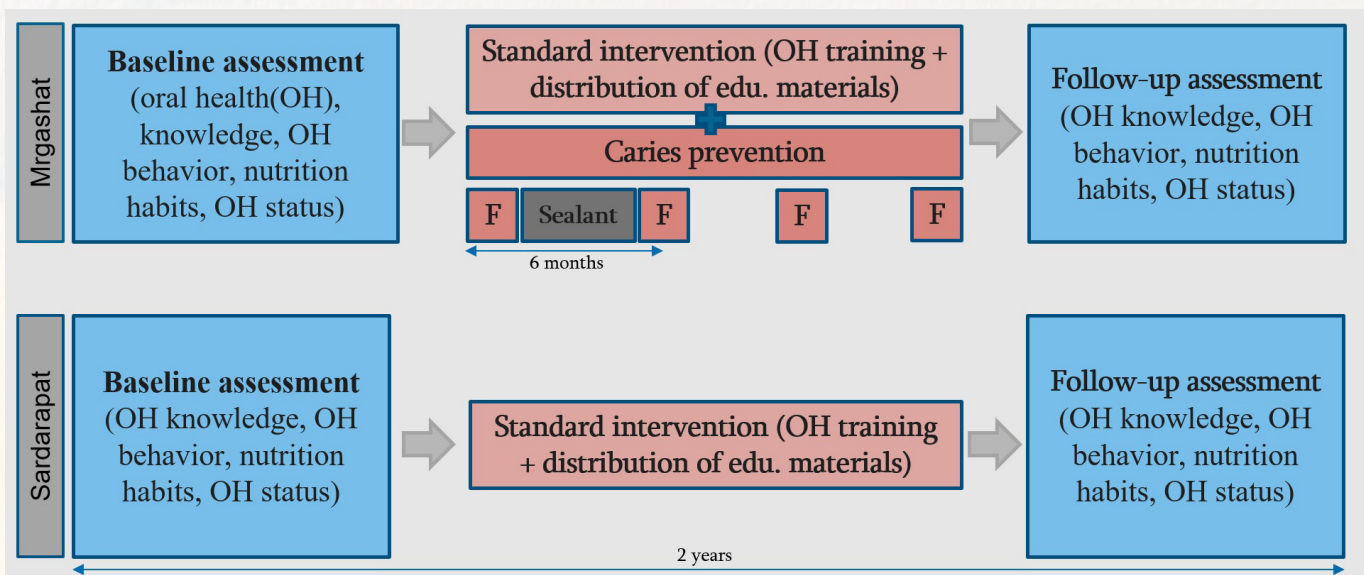
Mrgashat was chosen as an intervention 1 community, where study team conducted oral hygiene training among all primary schoolchildren and distributed oral health educational materials adapted for children and their parents, as well as conducted two caries-preventive procedures (fluoridation and sealant application) among them. As an intervention 2 (comparison) community, Sardarapat village of the same region was chosen, where only the awareness raising activities were conducted.



Training sessions on oral hygiene in Mrgashat and Sardarapat

The baseline and follow-up assessment included 1) A researcher-administered telephone survey on oral health knowledge and practice among parents of primary schoolchildren in intervention 1 and 2 communities, as well as clinical examinations of oral health of primary schoolchildren of intervention 1 and 2 communities using standardized oral health assessment methods to calculate DMFT index (number of the decayed, missing and filled teeth) and Plaque index (demonstrating the presence of plaque covering the 6 surfaces of a tooth).





Overall, 22 training sessions (one training per class) were conducted in 2 schools of Mrgashat, and the only school of Sardarapat. 400 parents of primary schoolchildren living in both communities participated in the telephone survey and around 457 schoolchildren underwent clinical examination of oral health. 243 children received fluoride application and 151 children received sealant application on their eligible teeth.

## 5.2. EIH Publications

EIH has published an article titled "Qualitative study of barriers and facilitators of health entrepreneurship in rural and semirural communities of Armenia" in the international, peer-reviewed journal *Rural and Remote Health*, that focuses on rural and remote health education, research, and practice.

The study was conducted by the researchers of the Avedisian Onanian Center for Health Services Research and Development (CHSR) in 2015 and served an important role in subsequently shaping the EIH program. It explored the perceptions of barriers and facilitators of medical entrepreneurship and the impact of medical entrepreneurship on the owners of private medical practices and communities in rural and semi-rural areas of Armenia served by these practices.

The findings of the study suggested that high investment cost, intense competition with state facilities, unfavorable laws and regulations, as well as lack of entrepreneurship and healthcare quality assurance skills were perceived as barriers to establishing/operating private healthcare practices. The dissatisfaction of healthcare providers with their work conditions in public facilities, instability of the job market in Armenia, and the development of clear marketing strategies by the entrepreneurs facilitated the establishment and operation of private practices. All of the interviewees felt that their practices had a positive impact on the communities they served, in terms of creating new jobs and introducing up-to-date and demanded services in those communities.



## 6. New EIH Beneficiaries in 2021 and 2022

Within the years 2021 and 2022, EIH approved the following applicants to become beneficiaries and have the opportunity to get assistance through various components of the program.

### 2021

- Dr. Mariam Matevosyan: Radiology services in Jermuk town, Vayots Dzor
- Dr. Naira Petrosyan: Dental Services in Kapan town, Syunik

### 2022

- Dr. Lusine Grigoryan: Dental services in Aghavnatun village, Armavir
- Dr. Liana Hakobyan: Dental services in Meghri town, Syunik
- Dr. Guram Aghababyan: Dental services in Noyemberyan town, Tavush
- Dr. Manush Gishyan: Cardiology services in Noyemberyan town, Tavush
- Dr. Gohar Mirzoyan: Dental services in Goris town, Syunik
- Dr. Vardan Manukyan: Different medical services in Stepanavan town, Lori
- Dr. Harutyun Ghrmajyan: Medical services in Hrazdan town, Kotayk

## 7. Opening Ceremonies

### *Expansion of Dental Services in Mrgashat village, Armavir*



Dr. Samvel Sedrakyan's clinic in Mrgashat, Armavir



Dr. Sedrakyan is a family dentist, practicing in his home village of Mrgashat, a village of around 5,700 residents, 42 km from Yerevan. Prior to applying to the EIH program, Dr. Sedrakyan ran a small dental clinic in his village. The increasing demand from the local community and nearby villages led him to consider expanding his practice and relocating to a new facility with new state-of-the-art equipment, capable of seeing more patients, and offering a better quality of care.



Dr. Sedrakyan completed the mandatory educational component of the EIH program and developed the business and quality assurance plans for his practice, which were presented to and approved by the EIH Executive Committee in 2020. As a result, he qualified for financial assistance to procure the planned dental equipment and receive the program's support for his continuous professional development and participation in public health initiatives in the region.

Besides the standard EIH courses in Healthcare Quality Assurance, Entrepreneurship and Accounting, Dr. Sedrakyan also participated in the Preventive Dentistry course offered by the EIH program. The course introduces participating dentists to incorporate contemporary preventive practices into the scope of dental services they offer. Further, in connection with his training in preventive dentistry, Dr. Sedrakyan was selected to participate in the pilot phase of the Dental Hygiene project, which aims at raising awareness of oral hygiene in the community, as well as conducting oral health assessments of primary school children living in the Mrgashat village. Dr. Sedrakyan is also participating in the mentorship component of the program, having regular meetings with a dentist mentor from the U.S., discussing clinical cases, exchanging experiences, and learning about new developments and approaches in the field of dentistry.

#### *Expansion of health services in Vedi, Ararat*



Dr. Hasmik Grigoryan's clinic in Vedi, Ararat



In 2022, Dr. Hasmik Grigoryan expanded services offered within her private medical center adding dental services. Dr. Hasmik Grigoryan is a radiologist by specialty who established a private practice in her hometown of Vedi, a town with a population of 46,000 around 56 kilometers from Yerevan. Dr. Grigoryan's practice offers a range of services, mainly diagnostic radiology, family medicine, and laboratory services. The demand for a quality dental clinic in the community and nearby villages compelled Dr. Grigoryan to consider expanding her practice to include preventive, diagnostic and curative dental services for adults as well as minors.

Dr. Grigoryan successfully completed the "Basics of Healthcare Quality Management," "Preventive Dentistry," "Entrepreneurship Skills," and "Healthcare Accounting" courses of the EIH program, subsequently developing and presenting her business and quality assurance plans, both of which were approved by the EIH Executive Committee in 2020. As a result, she qualified for financial assistance to procure state-of-the-art dental equipment and receive the program's support for continual professional development and participation in public health initiatives in the region.