

#opendata4covid19

Website User Manual



Ministry of Health
and Welfare



HIRA
HEALTH INSURANCE REVIEW & ASSESSMENT SERVICE

코로나19 국제협력 연구 안내

보건복지부와 건강보험심사평가원이 주관하는 ‘코로나19 국제협력연구’(#OpenData4Covid19 프로젝트)에 참여하신 국내외 연구자들을 환영합니다.

2020년 3월 26일 기준, 전 세계 200개국에서 코로나19 환자 454,396명, 사망자 20,615명이 발생하였고, 당분간 코로나19 감염병의 세계적 유행(pandemic)은 지속적으로 확산될 것으로 예상되고 있습니다.

이로 인해 세계 각국 국민들의 생명과 안전이 위협받고 사회·경제적 활동이 위축되고 있는 상황이지만, 진료현장에서 임상 의들의 진단과 환자 치료에 도움을 줄 수 있는 실제 임상자료 기반 근거 및 정부의 정책수행 시 필요한 정보 제공은 턱없이 부족한 상황입니다.

이에 대한민국 정부는 전 국민 건강보험제도를 통해 디지털 방식으로 신속하게 수집·정제, 비식별화한 코로나19 환자의 데이터셋을 전세계 연구자들이 분석할 수 있도록 세계 최초로 공개하게 되었습니다. 국내외 연구자가 함께 협력하여 심각한 질병에 효과적으로 대응할 수 있도록 적극적으로 참여하여 의미 있는 결과물을 도출해 주실 것을 기대합니다. 아울러 국내외 공공기관, 각국 정부 및 기업, 병원, 건강보험사 등이 이러한 대한민국의 데이터 공개 방침에 동참하여 주실 것을 권유합니다.

이 데이터는 자랑스러운 대한민국 의료진이 노력하여 생산한 것입니다. 연구자 및 관계자 분들은 이들의 노고에 격려와 감사 부탁드립니다.

데이터 이용과 관련하여 몇 가지 중요한 사항을 사전에 공지해 드립니다.

- ✓ 현재 공개되는 데이터(revision 001)는 2020년 3월 22일까지 청구된 확진자의 지난 5년 간 의료이용 데이터로, 비식별화 조치 후 SAS, R 및 공통데이터모델(OHDSI) 형식으로 공개됩니다. 향후 더욱 많은 데이터가 수집될 경우 데이터가 추가 공개될 수 있습니다.
- ✓ 본 데이터셋을 직접 다운로드하거나 반출하실 수 없으며, 웹사이트에 공개된 샘플데이터를 활용해 작성한 분석코드를 본 웹사이트에 제출하시면 건강보험심사평가원이 해당 코드를 실행하여 그 결과(통계)값만을 제공해 드립니다.
- ✓ 코로나19 관련 본 데이터셋 활용 연구 결과의 반출 및 출판을 위해서는 IRB의 연구 승인 또는 심의 면제 서류를 제출해주시기 바랍니다..
- ✓ 본 데이터셋을 이용한 연구신청은 1) 1 page 연구계획서 제출(국문 또는 영문)과 2) 데이터 이용 동의 후 완료됩니다.
- ✓ 공익적 목적을 위해 모든 연구 결과 및 그 출판물은 대중에게 무료로 공개되어야 하며, 또한 연구결과의 공식 발표 전 그 내용은 대한민국 정부 측에 사전 공유하여야 합니다. 제출된 연구결과에 관해 연구자에게 별도의 회신은 이루어지지 않으며, 대한민국 정부가 정책을 수립하는데 참고할 수 있습니다.
- ✓ 데이터 활용에 관해 세부적인 정보는 본 웹사이트 게시판에 등록된 매뉴얼을 참조하시기 바랍니다.
- ✓ 본 프로젝트를 수행하는 건강보험심사평가원의 연구인력 자원은 소중합니다. 따라서 연구자가 제출한 분석 프로그램을 수정하여 실행하거나, 또는 심평원의 연구원에게 직접 프로그램을 작성해 달라는 요청은 거부됩니다.
- ✓ 각국 정부, 각 학회는 한국의 의료체계에 대한 이해 및 본 데이터의 사용방법 등에 관해 커뮤니티 내에서 역량을 공유함으로써 본 프로젝트를 수행하는 인력들의 노고를 줄여 주시기를 부탁드립니다. 아울러 한국 내 연구자들과 함께 작업하기를 권장합니다.

Global Research Collaboration on COVID-19

Thank you for your interest in #OpenData4Covid19 project, a global research collaboration on COVID-19, jointly hosted by Ministry of Health and Welfare of Korea and Health Insurance Review and Assessment Service of Korea (hereafter HIRA).

As of March 26, 2020, 454 396 people have been confirmed with COVID-19 from 200 countries, and the total death toll reached 20 615 globally. The COVID-19 pandemic is expected to continue to spread further for the time being.

The novel coronavirus is threatening the livelihood and safety of global citizens, and social and economic activities have been hit hard in many countries. Yet, there is little evidence of real-world clinical data available for physicians or policymakers.

Against this backdrop, the government of the Republic of Korea decided to share the world's first de-identified COVID-19 nationwide patient data with domestic and international researchers. The data sets are collected and processed promptly, thanks to the Korean National Health Insurance System, covering the entire population across the nation. We hope that researchers from home and abroad join us and actively engage in producing effective measures fight the global spread of the deadly disease. Besides, we recommend that domestic and foreign public institutions, governments and corporations, hospitals, and health insurance corporations in each country participate to join in the open data initiative of the Korean government.

A proud entire medical team of Korea produced this data. Researchers and related persons are encouraged to be thankful for their efforts.

To apply for the data use, you are required to comply with the following terms and conditions:

- ✓ The current data set(revision 001), based on the insurance benefit claim sent to HIRA by March 23, 2020, is comprised of all COVID-19 tested cases and history of medical service use for the past five years. All data sets are de-identified and shared in the form of SAS, R, and CDM (OHDSI). More data will be available as they are gathered.
- ✓ Raw data will not be available for download nor transmission. Researchers will use the sample data on the website (<https://covid19data.hira.or.kr>) to produce an analysis code and submit the code to HIRA through this website. In return, HIRA will deliver the analysis result values (statistics).
- ✓ The researchers should submit documents demonstrating approval or exemption of the study from IRB review for export or publication of the results.
- ✓ To apply for research using our data, 1) submit a 1-page research proposal either in Korean or English, and 2) sign the data use agreement.
- ✓ For the public interest, all research outcomes and the following publication should be open access. Prior to any form of formal release, the content must be shared with the Korean government. The submitted manuscript will not get any feedback. Korean government may refer to them to strengthening policies.
- ✓ For more information, visit “<https://covid19data.hira.or.kr>” and check out the user guide.
- ✓ The resources of research personnel of the HIRA that undertakes this project are precious. Therefore, requests for the modify-and-execute the submitted code will be rejected.
- ✓ The research communities are encouraged to share their knowledge about the Korean medical system and competencies to use this data. It is also recommended to work with researchers in Korea.

감사합니다.

Thank you for your cooperation.

보건복지부 장관 박능후

Park Neung-hu
Minister of Health and Welfare

건강보험심사평가원 원장 김승택

Kim Seung-taek
President of Health Insurance Review and
Assessment Service of Korea

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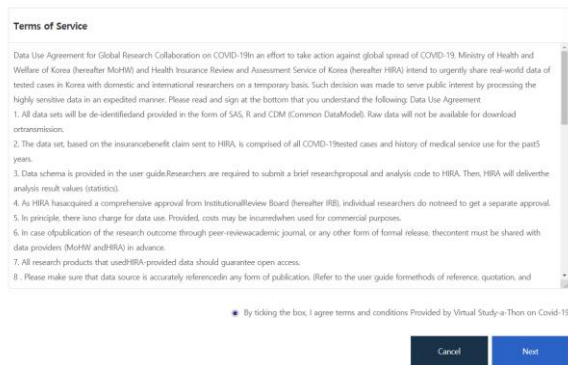
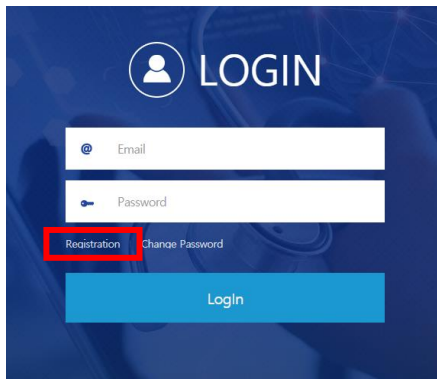
2.1. Create new project

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1. Membership

1.1. Member registration

- You can make your account in **Registration** Panel.

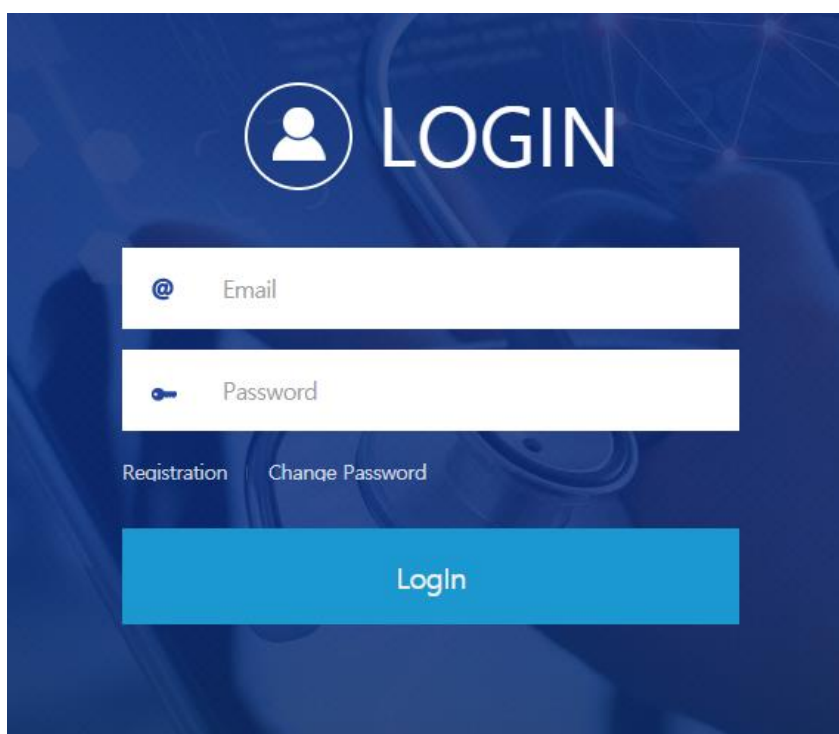
A registration form with the following fields: "Email" (containing "corona@gmail.com"), "Warning" (text: "example@your_company.org (Do not use gmail.com/naver.com)"), "Password" (placeholder: "Enter password"), "Confirm Password" (placeholder: "Confirm Password"), "Name" (placeholder: "Enter name"), "Organization" (placeholder: "Enter Organization"), and "Country" (placeholder: "Enter your country"). A blue "Register" button is at the bottom right.

- Enter your Email, Password, Name, Organization, Country.
- Be sure to register your **institution email**
- To complete to be a member, two **more steps** are needed:
 - ① Email confirmation of applicant
 - ② Approval of site admin

1. Membership

1.2. Login

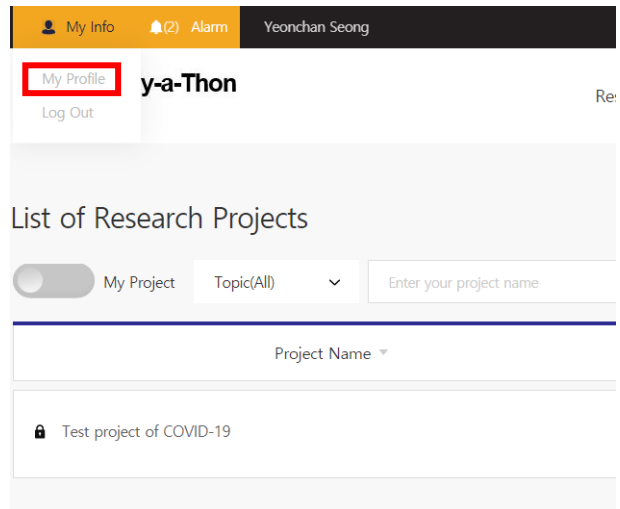
- If you are a member, you can login in landing page of the site.
- **Email id** and **password** are necessary.

A screenshot of a login page with a dark blue background. At the top center, there is a white circular icon containing a person silhouette, followed by the word "LOGIN" in large white capital letters. Below this, there are two white input fields. The first field has an '@' icon and the label "Email". The second field has a key icon and the label "Password". Underneath the input fields, there are two links: "Registration" and "Change Password". At the bottom, there is a prominent blue button with the text "LogIn" in white.

1. Membership

1.3. Edit profile

- To edit your account information, select the **My Info -> My Profile** .
- You can change your password, name, organization, country.



My Info Alarm (2) Yeonchan Seong

My Profile y-a-Thon Re

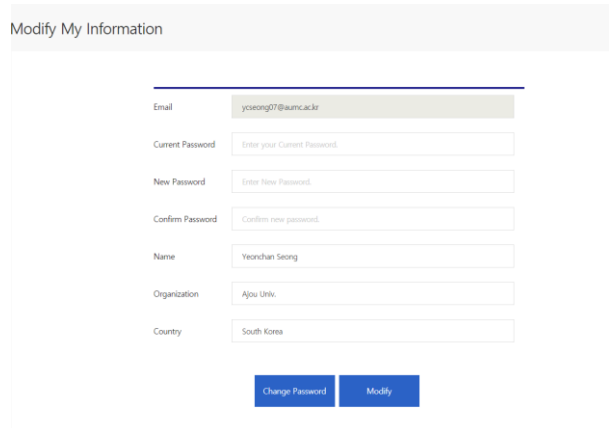
Log Out

List of Research Projects

My Project Topic(All) Enter your project name

Project Name

Test project of COVID-19



Modify My Information

Email yseong07@uamc.ac.kr

Current Password Enter your Current Password

New Password Enter New Password

Confirm Password Confirm new password

Name Yeonchan Seong

Organization Aju Univ.

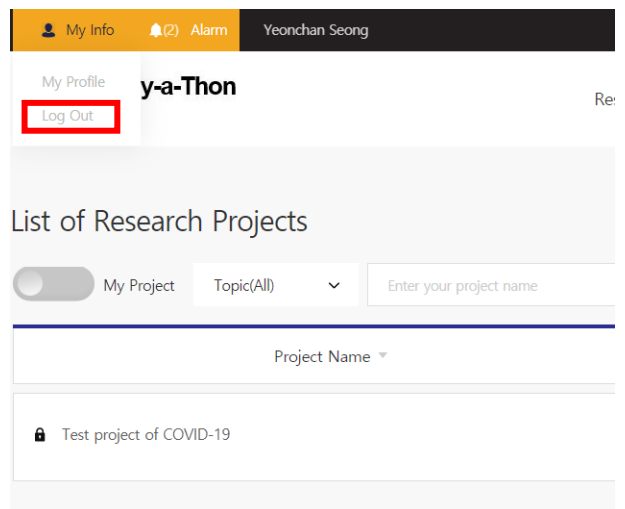
Country South Korea

Change Password Modify

1. Membership

1.4. Logout

- You can logout in **My Info -> Log Out** menu.

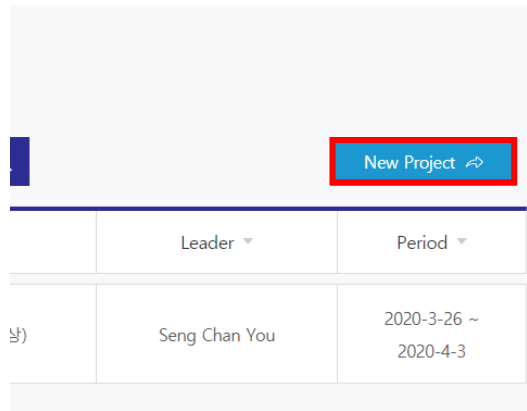


2. Research Project

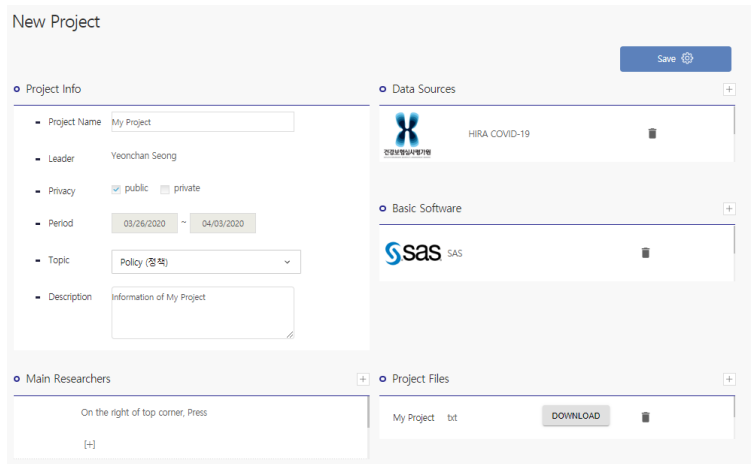
2.1. Create new project

- Click **New Project** to make your project.
- Enter your Project name, Topic, Description.
- Select project type (public / private).
- To select data sources and basic software, click ‘+’ button in the right top of each menu.
- You can add co-researcher and project files. (optional)
- Click **Save** button to register your project.

Basic Software Data Source Notice



A screenshot of a web interface showing a 'New Project' button highlighted with a red box. The button is located in the top right corner of a menu area. Below the button, there are dropdown menus for 'Leader' and 'Period'. The 'Leader' dropdown is set to 'Seng Chan You' and the 'Period' dropdown is set to '2020-3-26 ~ 2020-4-3'.

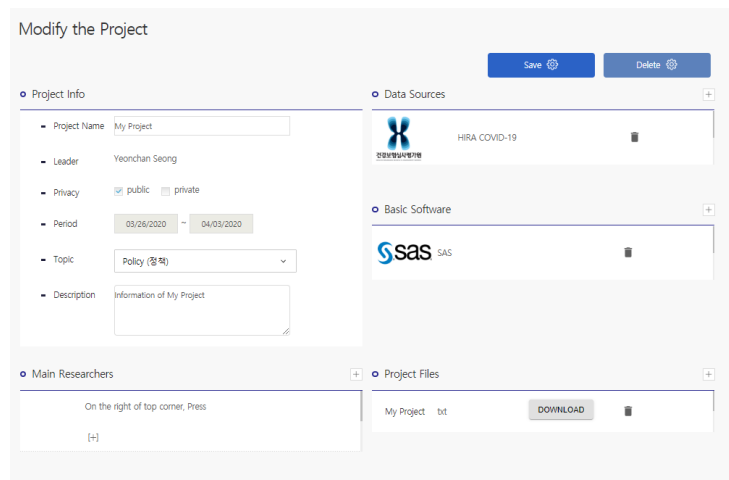
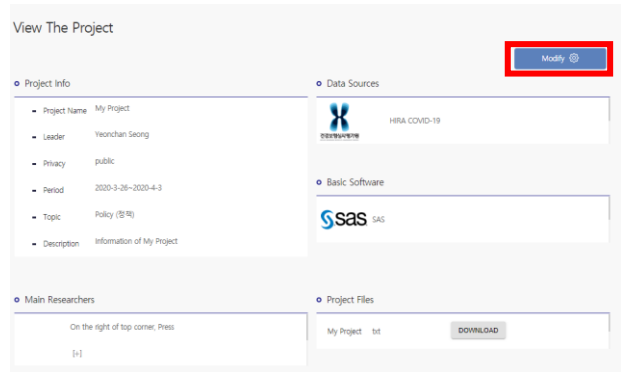


A screenshot of the 'New Project' form. The form is divided into several sections: 'Project Info', 'Data Sources', 'Basic Software', 'Main Researchers', and 'Project Files'. The 'Project Info' section includes fields for Project Name (My Project), Leader (Yeonchan Seong), Privacy (public selected), Period (03/26/2020 ~ 04/03/2020), Topic (Policy (정책)), and Description (Information of My Project). The 'Data Sources' section shows 'HIRA COVID-19' selected. The 'Basic Software' section shows 'sas SAS' selected. The 'Main Researchers' section has a placeholder for adding researchers. The 'Project Files' section shows 'My Project .txt' with a 'DOWNLOAD' button. A 'Save' button is located in the top right corner of the form.

2. Research Project

2.2. Modify/Delete project

- To edit your project information, click **Modify** button.
- You can edit your project information in this page.
- If you want to delete your project, click **Delete** button in the top right corner of the page.
- Only a leader of a project can delete the project.



If you have any question, please write on Q&A board.

Thank you