ASIA PACIFIC PANDEMIC PREPAREDNESS AND RESPONSE REGIONAL FORUM

WORLD BANK GROUP

Ministry of Economy and Finance

PIONEERING HEALTHCARE BIG DATA IN RESPONSE TO THE COVID-19 PANDEMIC

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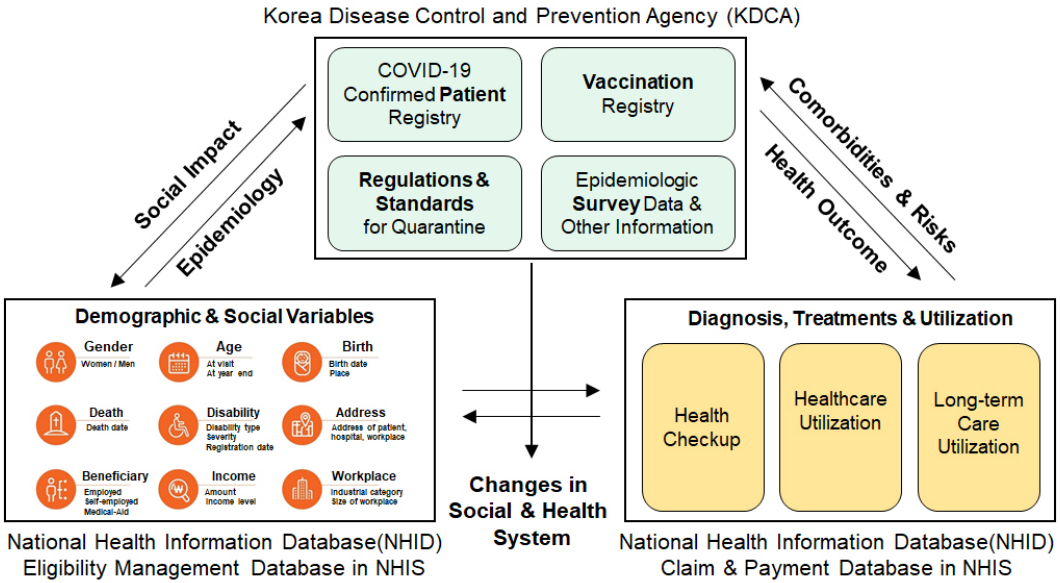
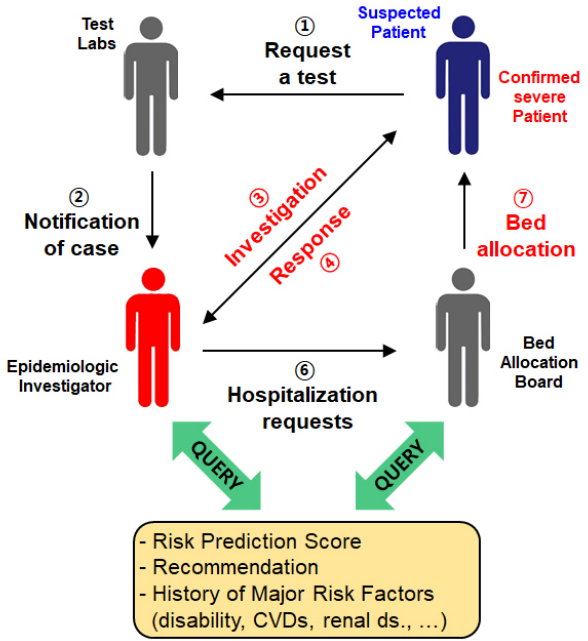
K-COV-N LINKAGE DATABASE

Korean Disease Control and Prevention Agency – COVID-19 – National Health Insurance Service



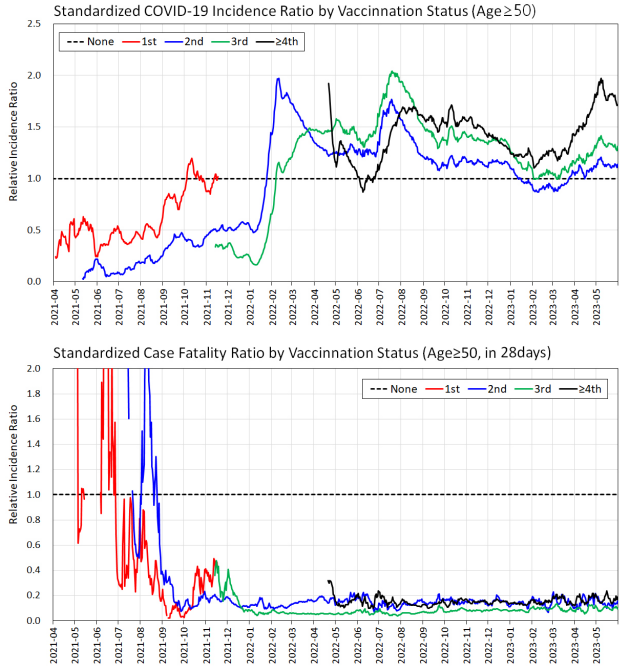
- ✓ For the evidence-based quarantine policies
- ✓ Combining the KDCA and the NHIS data
- ✓ Open big data for academic and private researchers
- ✓ Versatile data enables interdisciplinary research

RISK PREDICTION SCORE QUERY SERVICE



- ✓ In late 2021, COVID-19 patient explosion → Bed shortages and system crisis
- ✓ Services that agents can check a Patient's Risk Prediction Score and 8-item Medical History during a phone survey
- ✓ Improved communication and minimized conflicts between agents
- ✓ 17.2 million uses (98%) by June 10, 2022 approved by the Privacy Commissioner

POPULATION-BASED EFFECTIVENESS MONITORING



- ✓ Daily-based population, vaccination status, incidence, and death from the K-COV-N
- ✓ All vaccinations were effective against incidence for 3 to 5 months.(It is a natural course!)
- ✓ Case fatality rates remained from 0.1 to 0.2 times that of the unvaccinated population.
- ✓ Now we are focusing on the unvaccinated and high-risk population.

SURVEILLANCE OF INCIDENCE & EFFECTIVENESS

- ✓ From August 31, 2023, the Korean Disease Control and Prevention Agency (KDCA) downgraded COVID-19 from Class 2 to Class 4.
- ✓ As Class 4, surveillance system changed from MANDATORY to SENTINEL.→ Incidence rate is no longer available!
- ✓ To assess the INCIDENCE and EFFECTIVENESS of interventions,
- ✓ Now we are developing a NEW national surveillance system using diagnoses and related claims from National Health Insurance data.

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