

# STAMINA - Innovative platform for Covid 19 pandemic prediction and crisis management

A. Pasat, G. Suci, I. Pop, I. Suci - *BEIA Consult International*

D. MODOACA, A. UNGUREANU, D. MATEI - *SNCR*

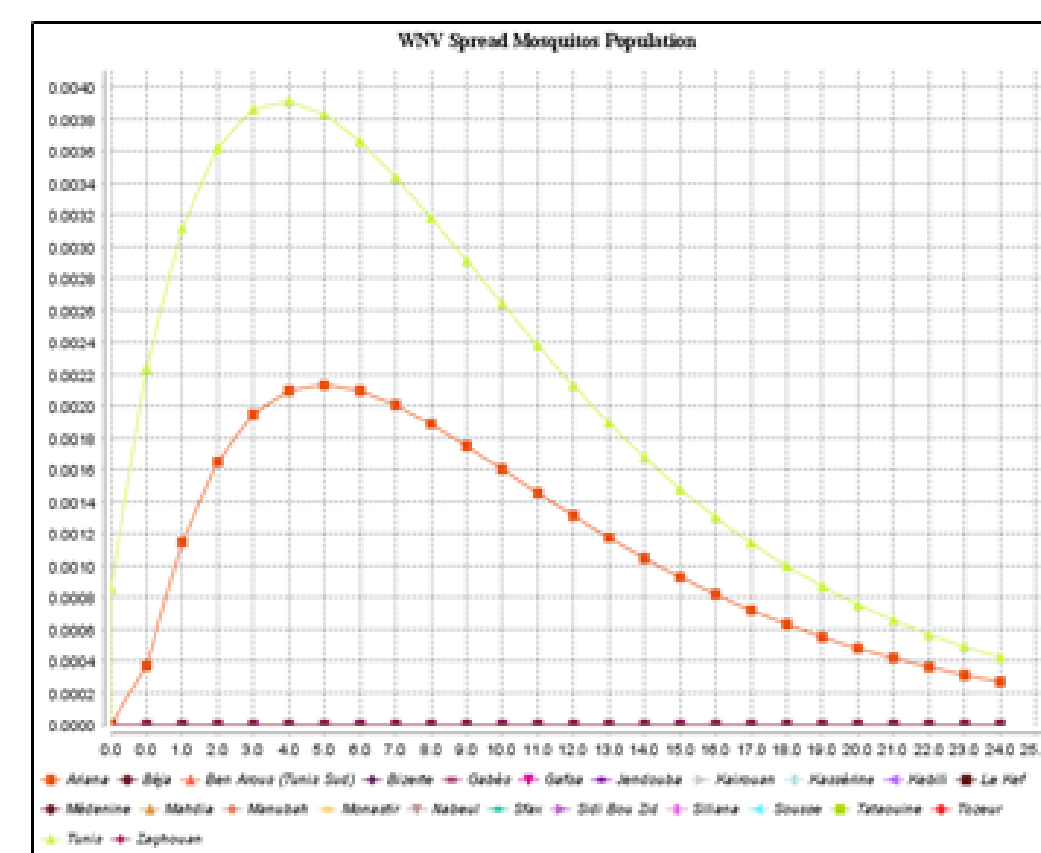
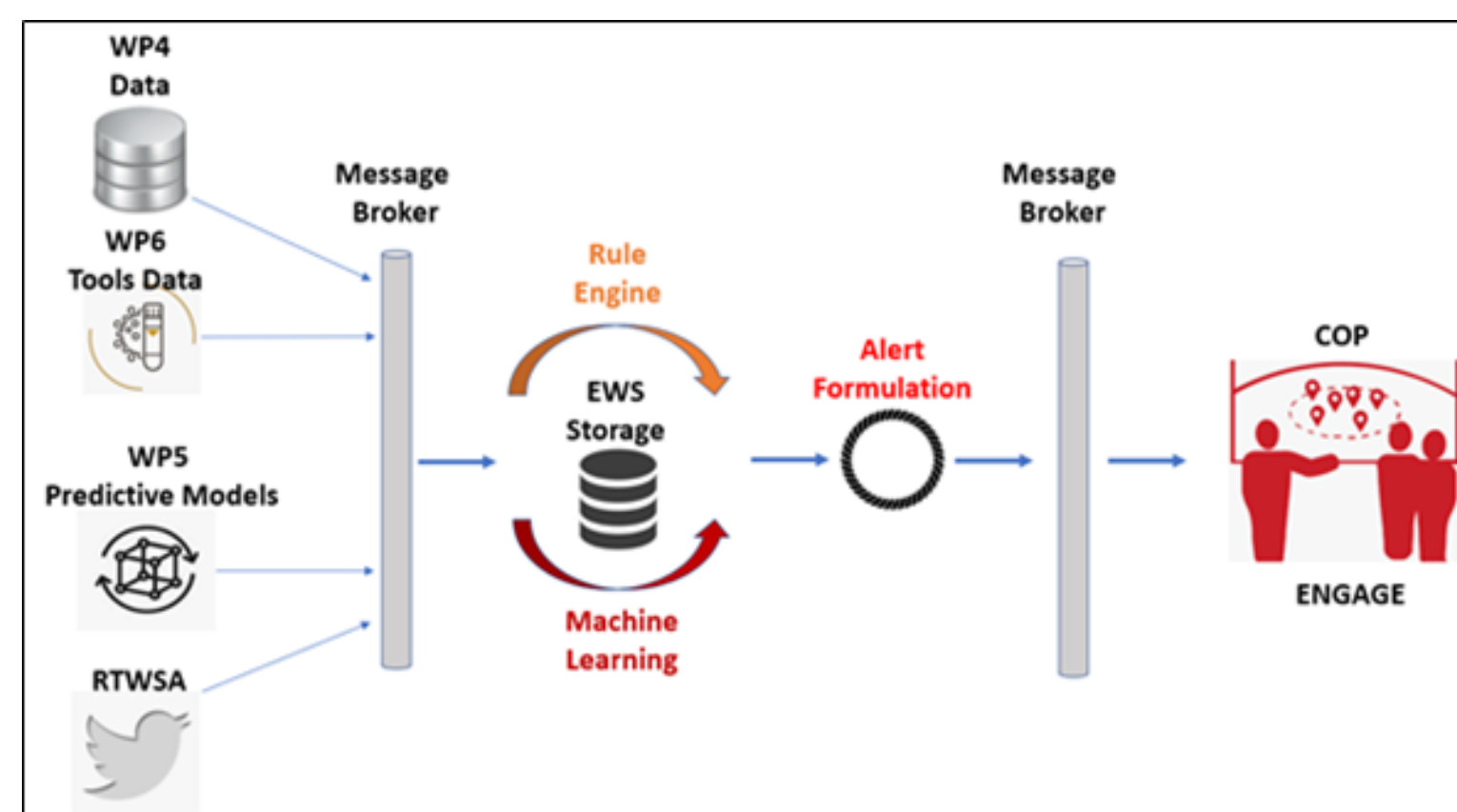
D. Ionescu - *SUUB UMF Carol Davila*

## Objectives:

- Improve **preparedness** and **response** in case of **crisis management** situations
- Provide **user-friendly software tools** for stakeholders
- Increase **the diagnostic capability** of **epidemiological cases**

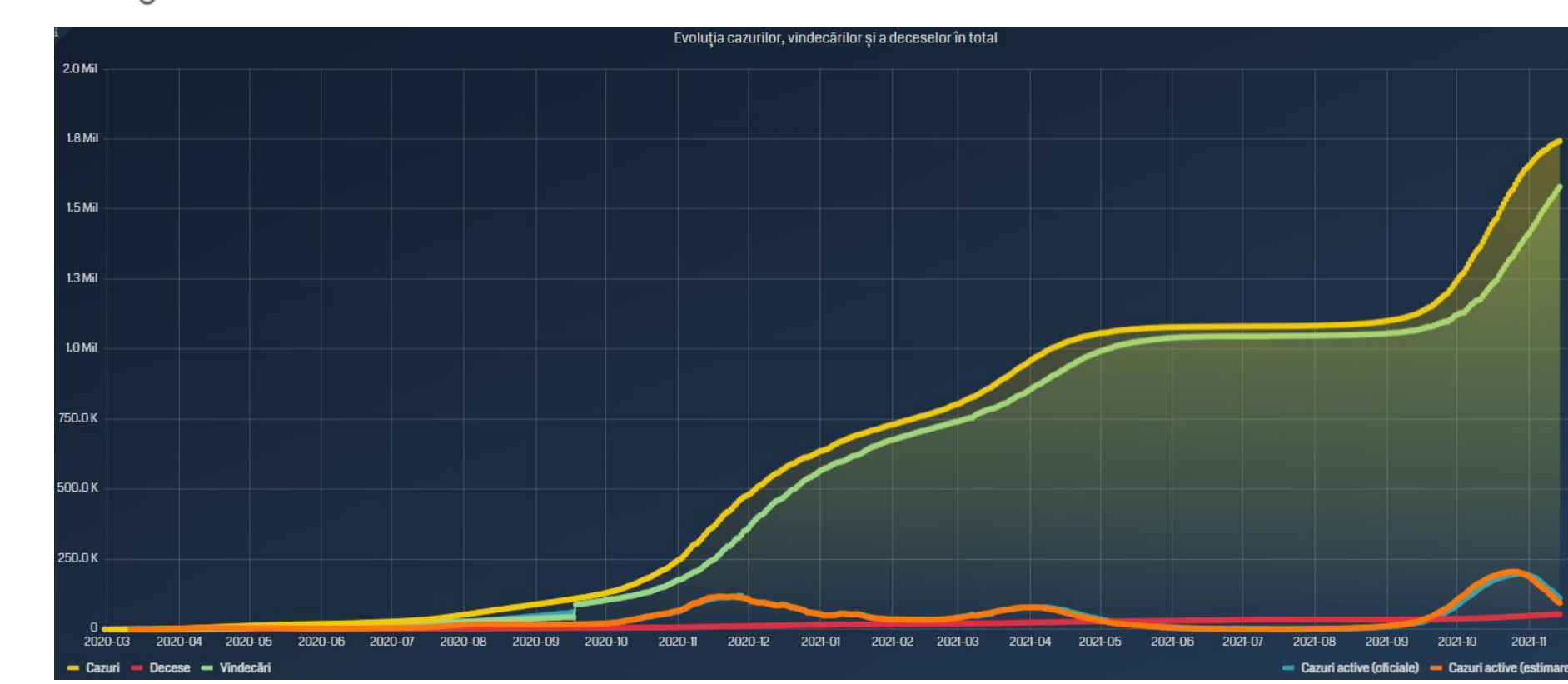
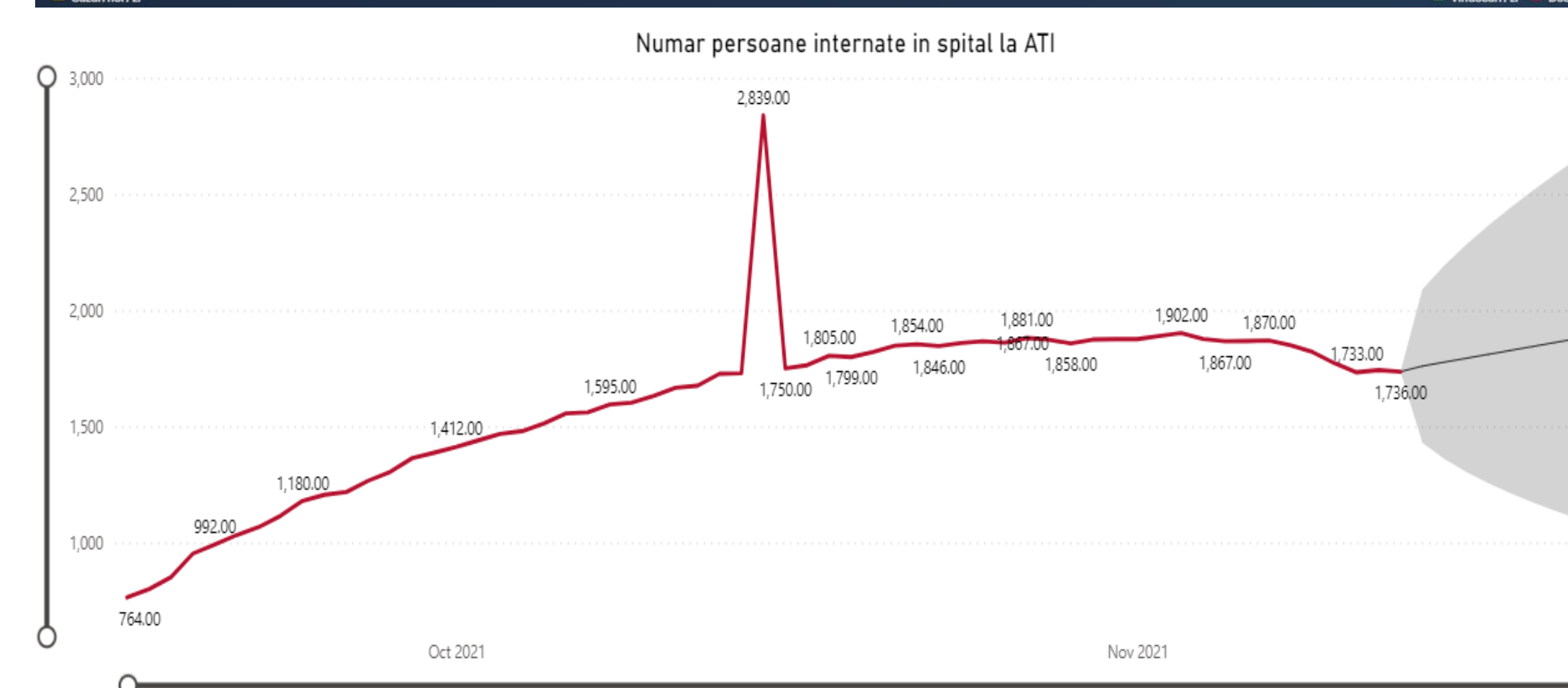
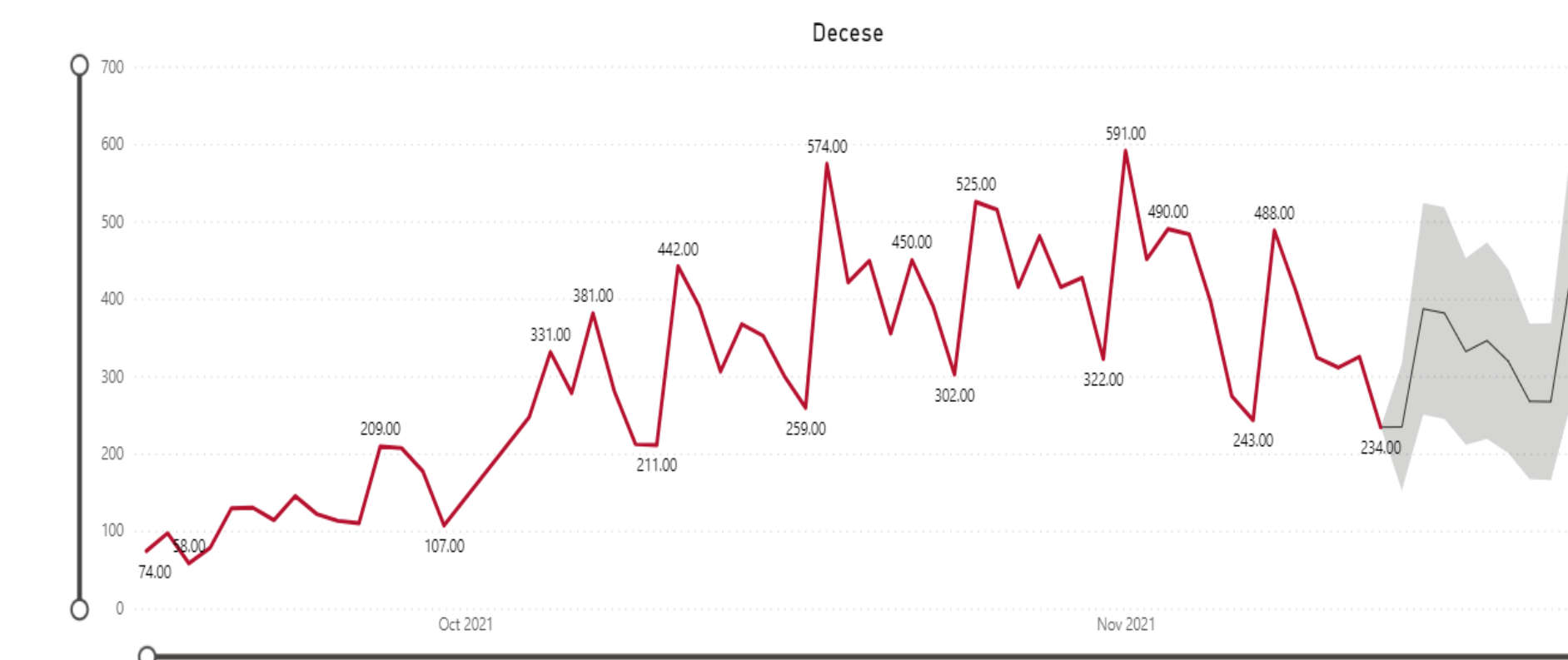
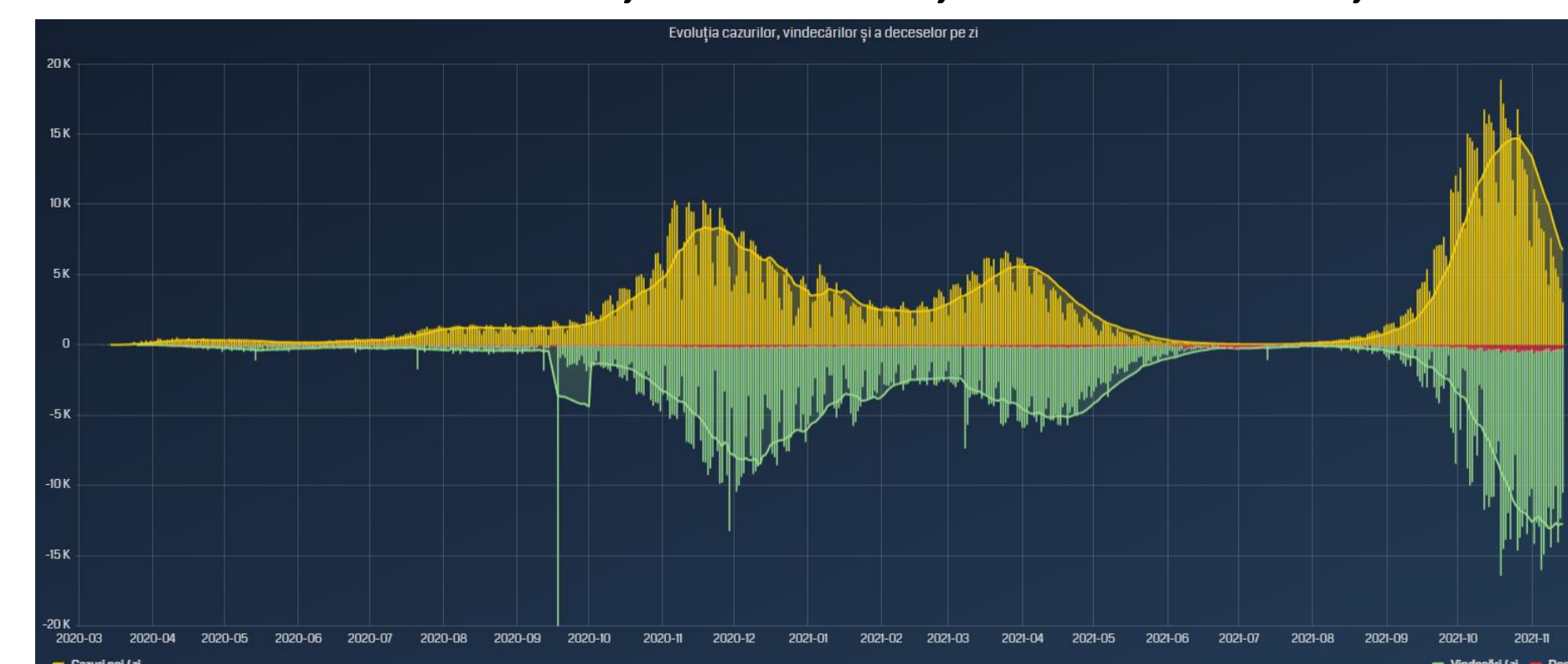
## Methods:

- AIR (Antimicrobial Resistance Model) Scenario Generator)
- PALMS (Lifelong physical activity modelling and simulation) CRISISHUB-CMT (Crisis Management Tool)
- CHARM Dynamic Hospital Management) Social Media Analysis Tool (WSMA)
- FACS (Flu and Coronavirus Simulator) EMT (Common Operation Picture)
- FLEE (Agent-based modelling code for transport infections) ENGAGE (Emergency management and response)
- GLEAM (Global Epidemic and Mobility Model) IPT (Information Protection Tool)
- AIR (Antimicrobial Resistance Model) DMHT (Data Management and Harmonization)
- EWS (Machine Learning-Based Early Warning System), POCT (Point of Care Tools SmarKO, PCR, CRISPR, COLORIMETRI, DROPLET MICROFLUIDICS)
- BIMS-WNV (Predictive Modeling Tool for West Nile Virus Multi-agent Model)
- PPT-SG (Preparedness Pandemic Tool former



## Results:

Based on the open data there are online platforms using Grafana [1] through which university researchers can analyze relevant data on the economic impact of the COVID-19 pandemic, in the form of interactive infographics. For the Romanian trial we envision to demonstrate several tools such as EWS, PPT-SG, ENGAGE, CHARM, CRISISHUB-CMT, WSMA, EMT-COP, DMH, and POCT-SmarKO.



## Conclusion:

STAMINA proposes a complex framework for assessing COVID-19 in a multilevel governance strategy and develop an online portal and toolkit in the governmental, public health and civil society domains.

## References:

- [1] COVID19 ro Romania economy. 2021. COVID-19 – Romanian Economic Impact Monitor. [online] Available at: <https://econ.ubbcluj.ro/coronavirus/>
- [2] Vaccin.live. 2021. Vaccin.live. [online] Available at: <https://vaccin.live/covid>