Bolstering Serbia's ability to communicate about health data

Background

What happens to a person's data when they seek treatment for a health problem in Serbia?

Say that someone gets bitten by a fox in their village. That person goes to their local health facility for treatment, where the facility collects and sends data from their case to the regional public health institute. After that, the person's information is shared with the national Institute of Public Health (IPH) Batut, which is in charge of collecting, aggregating, analyzing, and disseminating the country's population-level health data—but the institute has faced several challenges with this work in the past few years.

Filip Arnaut is a consultant for USAID's Country Health Information Systems and Data Use (CHISU) program who has worked as a public health statistician at IPH Batut since January 2023. According to Arnaut, an area of IPH Batut's work that has benefited from support has been rethinking—and ultimately revitalizing—how they communicate about Serbia's public health data.

Steps Taken

For Arnaut, much of his day-to-day work contributes to IPH Batut's statistical yearbook, the institute's primary publication. Produced annually, the yearbook is a primary source of public health data in Serbia and includes information about Serbia's primary health care services; environment and health; communicable and noncommunicable diseases; and more. Arnaut noted that the yearbook has not changed much over the years in terms of formatting or disseminating results.

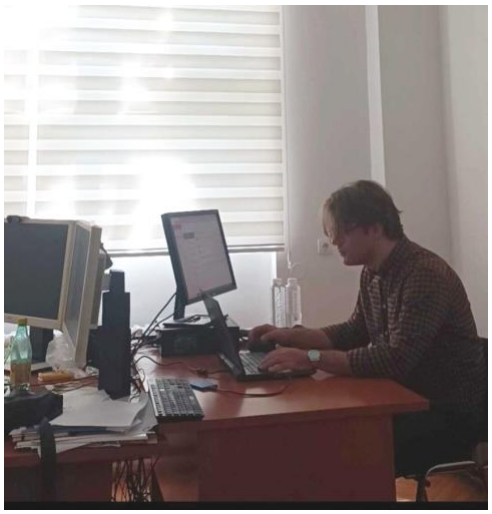
"Under CHISU and in collaboration with the IPH Batut staff, we can make proposals for changing the yearbook design, format, dissemination of results, and much more," Arnaut said.

Country Health Information Systems and Data Use (CHISU) is USAID's flagship data and information system program to strengthen host country capacity and leadership to manage and use health information systems to improve evidence-based decision-making. **www.chisuprogram.org**

So Arnaut has been helping IPH Batut redesign the yearbook, which historically contained many lengthy tables that were not always easy to understand or work with. He advocated shortening the entire publication, making more tables supplementary, and including more images and figures to make information easier to understand. For example, CHISU has helped IPH Batut automate visualization of the country's geospatial data to make it more accessible.

In addition, several organizations in Serbia that use the data in the statistical yearbook have complained in the past that the data has not been easy to use and analyze because it was in PDF form—so to address this, CHISU supported IPH Batut in transforming much of its data from PDFs to a machine-readable format.

"When you have data in a PDF, it's like the same as having it on paper," Arnaut said. "You really can't do much with it." This means that the data can't be cleaned and can't be organized; it can only be manually copied elsewhere for further action.



Filip Arnaut, a public health statistician and CHISU consultant, works at his desk at IPH Batut. Credit: Filip Arnaut

Results + Next Steps

For the first time, several chapters in last year's yearbook contained links within the PDFs for downloading data tables—and more easily allowing Serbians to use the data how they wanted. "It's a step in the right direction to have data in that format so that more people can use it for their needs," Arnaut said. For the upcoming yearbook, he recently submitted his proposed changes in an initial draft.

CHISU's support for IPH Batut's statistical yearbook is making data analysts' jobs easier—and allowing their analysis to be shared more broadly and more clearly, which will ultimately lead to more informed decision making when it comes to addressing health problems in Serbia.

IPH Batut will be well-equipped to analyze and communicate about the data it receives—be it from a fox bite or any other health problem that Serbians might have. And Arnaut has learned a great deal from his experience working with CHISU and IPH Batut that he can apply to his PhD studies about the application of machine learning in geophysics and geosciences. These lessons learned include the importance of data communication to a wide audience, open-data and open-government concepts, and the development of tools for people to use in their daily lives.

"CHISU has brought much-needed attention to data communication and use of that data by a broader audience, which is ultimately crucial in today's data-driven landscape," he said.

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