



Beyond Crisis: The Ukraine War's Multifaceted Impact on Poland's Health Care Resilience

Krzysztof Goniewicz;¹  Katarzyna Naylor² 

1. Department of Security Studies, Polish Air Force University, Poland

2. Department of Emergency Medicine, Medical University of Lublin, Lublin, Poland

Correspondence:

Krzysztof Goniewicz
Polish Air Force Academy
Deblin 08-521 Poland
E-mail: k.goniewicz@law.mil.pl

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ED: emergency department
ESI: Emergency Severity Index

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Dear Editor,

Poland's health care system is facing significant challenges, particularly in its emergency departments (EDs) which are dealing with increased demand and resource constraints. Recent studies highlight the rising patient volumes and shortages of medical staff as primary concerns.^{1,2} Historically, Polish EDs have predominantly operated within the public sector, characterized by significant wait times and periodic difficulties in accessing primary care providers. Prior to the conflict, patients often faced hours-long waits due to a mix of chronic under-funding, staffing shortages, and high demand for acute care services. This backdrop set the stage for the current crisis, where these systemic issues have been further exacerbated by additional pressures.

This situation, characterized by overcrowded EDs, excessive wait times, and avoidable fatalities, calls for immediate attention and rectification. Notably, the issue at hand is not merely a resource crisis but a comprehensive systemic problem that requires a detailed understanding and multi-pronged approach for effective resolution.

Furthermore, the on-going conflict in Ukraine, which began in 2014, has led to a significant humanitarian and displacement crisis. Over the past two years, escalating tensions have forced more than 1.2 million individuals to seek refuge in neighboring countries, including Poland, placing unprecedented demands on its health care infrastructure. The influx of refugees has not only increased patient volumes, but also introduced new complexities in health care delivery, thereby highlighting the urgent need for comprehensive reforms and an adaptive response to this evolving challenge.³

Despite these challenges, it's important to recognize the proactive measures undertaken by Poland's health care system to mitigate the impact. Initiatives such as the expansion of ED capacities, investment in health care infrastructure, and the rapid deployment of mobile medical units have been instrumental. These efforts demonstrate a commitment to addressing both immediate and long-term health care needs, ensuring that emergency care remains accessible and effective for all residents, including the refugee population.

Addressing the multifaceted challenges posed by the conflict and the health care crisis requires an interdisciplinary approach. Collaboration between health care professionals, policymakers, emergency services, and the community is crucial. This collaborative framework should focus on comprehensive crisis management, encompassing emergency response, public health, social services, and mental health support, tailored to the needs of both local residents and the refugee population.

The EDs are designed to handle acute and life-threatening conditions, yet they are witnessing a deluge of cases that fall outside this spectrum.⁴ Increasingly, EDs are being used as an expedited route to routine diagnostics or treatments that are more appropriately handled by primary health care facilities.⁵ This misuse of EDs is causing significant strain on the system, stretching resources thin, and deteriorating the quality of emergency care.⁶

The impact of the Ukrainian conflict on Poland's EDs is profound. Since 2014, over 1,200,000 Ukrainian refugees have been welcomed, notably increasing patient volumes in EDs.⁷ This situation demands an enhanced focus on prehospital care protocols and disaster readiness. It's crucial that emergency services are equipped for a rapid and efficient response to the escalating health care needs. Integrating strategies like mobile medical units and community-based emergency preparedness programs is essential to manage this surge effectively, addressing the immediate needs while anticipating future challenges.⁵

In response to similar crises, countries such as Germany and Sweden have implemented coordinated care pathways and community-based health interventions that have significantly alleviated the pressure on emergency services.⁸ For instance, Germany's



integration of telemedicine into triage processes during the refugee crisis of 2015 helped reduce wait times and improved patient outcomes by ensuring that only those in need of emergency care visited EDs.⁹ Drawing on these examples, Poland could consider similar integrations tailored to its specific health care infrastructure and needs.

To capture the urgency and human aspect of these reforms, interviews with Polish health care workers reveal a system at its breaking point. One nurse from Warsaw shared: “The wait times are not just numbers; they represent people in pain, and sometimes in life-threatening conditions, who simply cannot get the help they need in time.” Patients echo this sentiment, with one recounting a twelve-hour wait for acute appendicitis treatment, highlighting the dire need for effective triage systems like the Emergency Severity Index (ESI) and better prehospital care.

These patients often present with unique health needs, including trauma, chronic diseases, and mental health disorders. The language barrier further complicates medical care, leading to delays and potential health risks. Additionally, the risk of infectious diseases like measles and COVID-19 has risen, placing further demands on the health care resources.^{4,7,10}

The overcrowding of EDs in Poland has resulted in heart-wrenching narratives of patients succumbing to their conditions while waiting for treatment. The inability to provide immediate care to critical patients represents a profound failure of the health care system. The evidence from previous research highlights the severe impacts of systemic challenges on Poland's health care system, where overcrowded EDs, exacerbated by under-funding and the influx of Ukrainian refugees, result in prolonged wait times and critical health care delays.¹ This situation calls for a methodical evaluation and reform of existing health care protocols and infrastructure to enhance service delivery and patient care.

Such a crisis prompts us to ask several critical questions: What mechanisms can we put in place to prevent non-emergency cases from inundating EDs? Is there a public misunderstanding about when to seek emergency care? Are primary health care facilities failing to meet the demands of patients, causing them to turn to EDs instead?

These challenges are compounded by the current crisis. Therefore, addressing them requires not only public education and structural health care reforms, but also a specific focus on integrating the health care needs of the refugee population. Effective integration within Poland's health care system requires targeted solutions including language translation services, as many Ukrainian refugees face significant barriers due to language differences.¹ Additionally, there should be an increased awareness and proactive management of prevalent health issues such as trauma and chronic diseases commonly found among Ukrainians, as noted by the Ministry of Health of Poland.⁴ Improved coordination across health care levels is essential, leveraging insights from successful models of care pathways and telemedicine, as evidenced by other European health care systems.

In tandem, structural reforms are required to improve primary health care facilities – the first point of contact for patients. Enhancing the accessibility, quality, and efficiency of primary care can prevent non-emergency cases from resorting to EDs. This involves substantial investment in primary care infrastructure, workforce expansion, and skill enhancement of general practitioners, along with measures to ensure easy and equal access to these services for all patients. One proposed solution to consider is the implementation of night and holiday primary care services

within each hospital that has an ED in its structure. This service could effectively manage patients who do not require complex diagnostics or specialist treatments, thereby reducing unnecessary ED visits.¹¹

To ensure a robust and evidence-based approach, the implementation of the ESI system—a triage tool used to categorize ED patients based on the severity of their condition and urgency of need for medical care—should be augmented with continuous training programs, leveraging data from Poland and other nations with exemplary emergency care models. This will not only refine triage processes but also align them with international best practices in disaster medicine and emergency health care.

However, the correct implementation and understanding of the ESI demand experienced triage personnel, necessitating investment in training and further quality control measures.^{12,13} An efficient triage system is critical for identifying non-emergency cases at an early stage and redirecting them to more suitable care facilities.^{14,15} Not only would this alleviate the burden of overcrowding in EDs, but it would also ensure that critical cases receive attention without delay.

The situation in Poland is a microcosm of global emergency health care challenges. By examining and adopting strategies from countries with successful emergency health care models, such as coordinated care pathways and telemedicine initiatives, Poland can not only address its current crisis, but also contribute to a global repository of knowledge and strategies, enhancing emergency health care world-wide.

In addition to external pressures, it's crucial to acknowledge the pre-existing conditions that have contributed to the current state of Poland's health care system. Historical under-funding and a lack of capacity have been significant factors, underscoring the need for a comprehensive approach to health care reform. Addressing these foundational issues, alongside the challenges posed by the refugee crisis, will be essential for creating a resilient and sustainable health care system. The integration of lessons learned from other countries and the implementation of innovative care models offer a path forward.

The crisis facing Poland's EDs is not an isolated incident; it reflects a larger, global issue in emergency health care delivery. Learning from other countries that have successfully managed similar problems can provide valuable insights. Successful strategies such as the employment of triage nurse practitioners, telemedicine consultations, and the development of coordinated care pathways, all of which have been shown to be effective elsewhere, could be tailored to the Polish context. Additional solutions such as rapid assessment, doctor-led triage, and patient streaming have also brought about positive results in other countries.¹⁶

The current situation in Poland's EDs, although alarming, also presents an opportunity for profound changes. All stakeholders – policy makers, health care providers, and patients – must rise to the occasion to reshape health care delivery and access.

The repercussions of the Polish emergency health care crisis extend beyond its borders. It serves as a case study that the global emergency medicine community can learn from.^{17–19} This crisis prompts a global call to action to share knowledge, experiences, and solutions that can contribute to building a resilient, efficient, and inclusive health care system.

The insights garnered from addressing Poland's health care crisis should be translated into actionable policies. This involves developing a clear roadmap for health care system reform, emphasizing capacity building in EDs, enhancement of primary

care, and integration of prehospital care services. Policymakers must ensure that these reforms are not just reactive measures but part of a sustainable strategy to fortify Poland's health care system against future crises.

The future of Poland's emergency health care system, and by extension, the health and well-being of its population, hangs in the balance. This crisis is not just a call for change, but a pressing need for immediate, comprehensive, and systemic reforms. While we can draw inspiration and learn from global best practices, the onus is on us, within Poland, to implement solutions tailored to our unique context and challenges.

The commitment of all stakeholders – policy makers, health care providers, patients, and the broader Polish society – is paramount

in this transformative journey. It's our collective responsibility to ensure a robust, patient-centered, and responsive health care system for all Poles, now and into the future. Let us rise to this occasion and seize the opportunity to redefine and improve our health care landscape.

As we mark two years of the Ukrainian conflict's profound impact on our health care system, it's clear that immediate, comprehensive, and adaptive reforms are crucial. The Polish health care system must evolve rapidly to address both existing systemic inefficiencies and the new challenges brought by the refugee influx. This evolution is not just a response to a crisis but a step towards building a resilient, inclusive, and efficient health care system for the future of Poland.

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