Scientific Research Publishing

Open Journal of Emergency Medicine, 2026, 14(4), 253-263
https://www.scirp.org/journal/ojem
ISSN Online: 2332-1814
ISSN Print: 2332-1806

Private First Aid Facilities in Italy: A Retrospective Analysis on 800 Consecutive Accesses in a Single-Centre

Aurelio Sessa, Claudia Soldati, Laura Formenti

Internal Medicine, Clinica Isber, Varese, Italy
Email: aurelio.sessa@libero.it

How to cite this paper: Sessa, A., Soldati, C. and Formenti, L. (2026) Private First Aid Facilities in Italy: A Retrospective Analysis on 800 Consecutive Accesses in a Single-Centre. *Open Journal of Emergency Medicine*, **14**, 253-263.
https://doi.org/10.4236/ojem.2026.144023

Received: October 6, 2026
Accepted: November 10, 2026
Published: November 13, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/

Open Access

Abstract

Private First Aid Facilities (PFAF) are becoming increasingly widespread across the national territory. The decision to use these facilities is driven primarily by the desire to resolve health issues quickly and by the feeling of being looked after a fast personalized care pathway. The services required correspond to mild or moderate clinical conditions, classified under white and green triage codes, which account for approximately 70% of Emergency Department (ED) visits and contribute significantly to ED overcrowding. This retrospective single-centre study analyzes 800 consecutive visits to a PFAF and it shows that 40% of patients are over 65 years old and that the clinical areas most frequently involved are traumatology (38.3%) and internal medicine (32.8%). Clinical issues falling within the fields of cardiology, pulmonology and gastroenterology account for nearly 50% of the internal medicine caseload. The speed of the diagnostic and therapeutic process is considered one of the service's strengths. Visits concluded within two hours of admission in 665 of 800 cases (83.1%). The average costs of a diagnostic-therapeutic pathway in the field of trauma-orthopaedical area are 265 euros, while for the internal medicine are 238 euros. PFAF can help relieve congestion in public ED.

Keywords

Healthcare Access, Private First Aid, Inappropriate ED Use

1. Introduction and Contextualization

Private First Aid Facilities (PFAF) are becoming increasingly widespread across the national territory precisely because of the critical issues facing the public emer-

gency care service which is unable to provide timely responses to minor clinical conditions (classified as "white" or "green" codes [1]) (See **Table 1**) that, in all fairness inappropriately overcrowd public Emergency Departments (ED). ED overcrowding is a well-known and widespread phenomenon due to a mismatch between the demand for healthcare services and the capacity to provide care within a reasonable timeframe, regarding both human resources and equipment [2]-[4]. According to the National Report by the Italian Society of Emergency Medicine (Società Italiana di Medicina d'Urgenza—SIMEU), ED visits totaled 18.27 million in 2023 [5], with a 2.5% increase in 2024, reaching nearly 19 million visits in 2025. Patients choose PFAF primarily to avoid the long exhausting wait times at public hospital ED, due to the unavailability or lack of immediate access to their own family doctor, or because they refuse, as a matter of principle, to go to a public ED. These PFAF are usually inside multi-specialty centers or private clinics where the presence of doctors and diagnostic tools makes it possible to offer this service. The primary reasons for seeking care at PFAF stem from clinical situations that cause concern and/or discomfort or, in the patient's view, require a quick resolution; the presence of trauma, wounds or moderate acute symptoms; the need for diagnostic imaging (X-rays, ultrasound scan [US], Computed Tomography [CT] or Magnetic Resonance Imaging [MRI]) for any part of the body or the need for rapid, effective clinical check-ups. The literature documents numerous international experiences regarding patients' use of PFAF. In the USA and Australia, as early as the mid-2000s, approximately 7% of all emergency visits took place in private facilities [6]. The clinical issues encountered are typically of low to moderate severity, with higher patient volumes on weekends and Mondays, and 69% of visits were completed within four hours [7]. The average age of users across four private emergency services in Queensland and Victoria (Australia) was 52 years; the majority were males, except among those over 80, where female users predominated. Private facilities enjoy a high level of user satisfaction, although the primary barrier is the cost that patients must knowingly bear out-of-pocket [8]; in Australia these costs range from $110 to $480 but can be higher depending on the investigations or specialist consultations required to complete the diagnostic and therapeutic process [9].

Table 1. Triage codes in Emergency Departments, Ministry of Health guidelines detailing the triage process, specifying the color codes and defining case severity.

Red	Critical	Interruption or impairment of one or more vital functions
Orange	Acute	Vital functions at risk
Blue	Not urgent matter required attention	Stable condition with distress requiring further diagnostic investigations and complex consultations
Green	Minor urgency	Stable condition with no risk of progression requiring simple therapeutic interventions
White	Not urgent	Condition of minimal clinical significance that does not require timely interventions

2. Aim of the Study

In the absence of national data in the literature, this study aims to inform healthcare professionals and stakeholders about the characteristics of patients accessing PFAF, their care pathways and outcomes, as well as the costs incurred by citizens.

3. Methods

Over a 30 months period (June 2023-December 2025) patient admission records for the PFAF service established within a private clinic in Varese (Northern Italy) were analyzed. These patients represent all consecutive admissions that completed the entire clinical pathway within the PFAF. For all patients, informed consent was obtained. The informed consent was approved by the medical director of the clinic in compliance with anonymity and protection of personal data. The study adheres to the principles of Good Clinical Practice, the Declaration of Helsinki and all relevant regulations. The PFAF covered in this report is open from 7:30 AM to 7:00 PM, Monday through Saturday and is located in the City of Varese, which has a population of approximately 80,000. The annual per capita income of residents in the province of Varese is €26,138, ranking the city 17° among 107 Italian provincial capitals in terms of per capita wealth (2023). Comprehensive information, covering access procedures for PFAF and situations where it should not be used, is provided both on the clinic's webpage and via informational materials in the waiting areas. Patients could access the facility directly or after contacting a dedicated telephone number. Triage is performed by physicians (internists or those with ED experience) or nurses currently on duty in the service. It was agreed that completing the entire diagnostic and therapeutic process within the following two hours would meet most of the expectations of patients who chose the PFAF. There is a standard fee for the initial patient admission and visit which includes completing the admission form and informed consent to proceed with the process of reaching diagnosis and determining appropriate treatment. The process concludes with a final report. Data from this retrospective cohort study were collected and analyzed using Microsoft Excel and variables are expressed as means or percentages.

4. Results

The demographic characteristics of the patients' sample are presented in **Table 2**. Females slightly outnumber males, and the mean age is approximately 61 years for women and 55 years for men. Subjects over 65 account for approximately 40% of all visits.

Over the 30 months period examined, 800 visits were made to the PFAF. Mondays and Saturdays are the days with the highest patient volume, accounting for approximately 38% of all weekly visits (**Figure 1**).

The most strongly represented clinical areas are Orthopedical Traumatology and Internal Medicine, which together account for nearly 71% of the services provided (**Figure 2**).

Table 2. Demographic characteristics of PFAF users.

	Males	Females	Total
N (%)	375 (46.9)	425 (53.1)	800 (100)
Age average ys (DS)	54.9 (20.9)	61.4 (21.4)	
Range ys	7 - 100	8 - 97	
Age groups ≤64 ys n (%)			473 (59.1)
65 - 74 ys	50	62	112
75 - 84 ys	41	91	132
≥85 ys	35	48	83

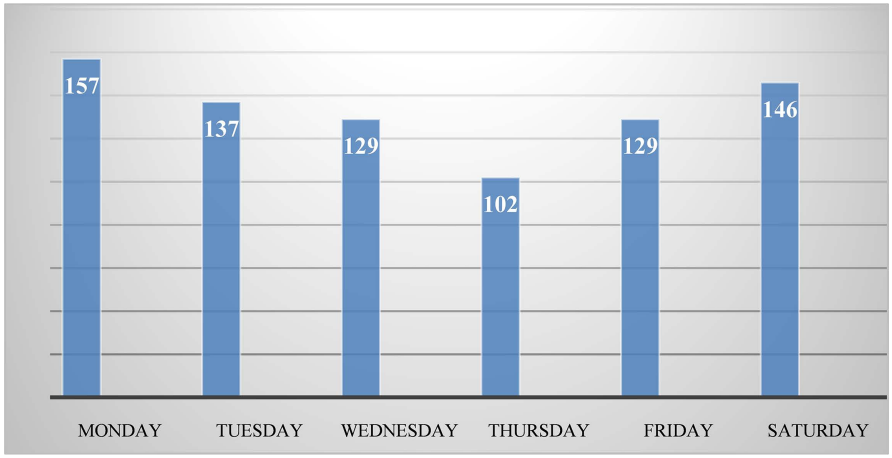


Figure 1. Distribution of visits throughout the week.

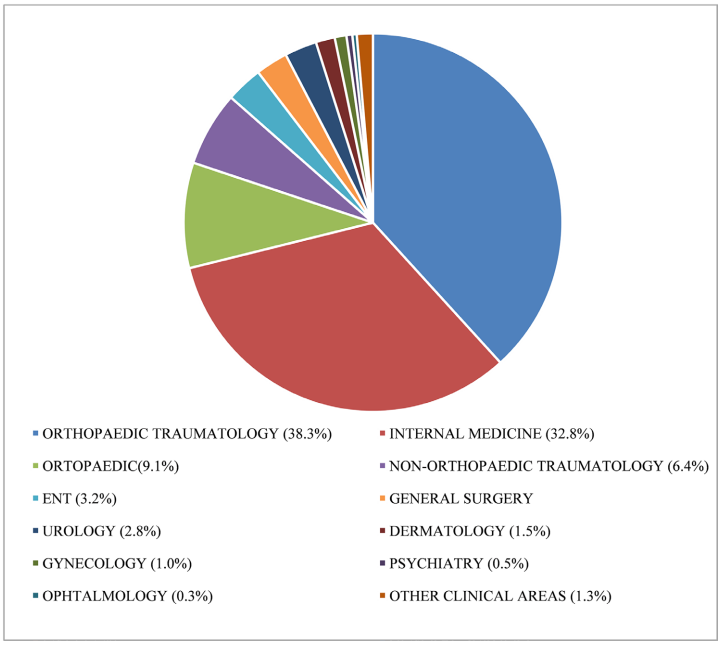


Figure 2. Clinical areas covered by the service.

Within the field of Internal Medicine, the services most frequently provided are in cardiology, pulmonology, and gastroenterology, collectively accounting for nearly 50% (Table 3).

Table 3. Specialized clinical areas within the internal medicine services.

Internal Medicine specialties	Frequency (n)	%
All Internal Medicine services	263	100.0
Cardiology	50	19.0
Pulmonology	41	15.6
Gastroenterology	40	15.2
Infectious diseases	24	9.1
Neurology	16	6.1
Other*	92	35.0

*Allergology, angiology, dermatology, diabetology, endocrinology, general medicine, ophthalmology, rheumatology.

Patient care involves a pathway that may utilize, in addition to the consultation, diagnostic investigations such as instrumental tests, imaging and specialist consultations. The diagnostic pathways were analyzed for both Internal Medicine and Trauma-Orthopedics to assess the types and volume of services required to reach a final diagnosis. The pathways are presented in Table 4 and Table 5.

Table 4. Diagnostic pathway in traumatology and orthopaedical clinical areas. 84 patients underwent to more than one diagnostic procedures.

	Frequency (n)	%
Patients included in traumatological and orthopaedical areas	378	100.0
Cases resolved with just the consultation	62	16.4
X-ray of one anatomical region	205	54.2
X-ray of two anatomical regions	73	19.3
X-ray of three or more anatomical regions	45	11.9
CT	18	4.7
MRI	16	4.2
Orthopedic consultation	41	10.8
Blood test	2	0.5

CT = Computed Tomography; MRI = Magnetic Resonance Imaging.

Table 5. Diagnostic pathway in Internal Medicine area. 64 patients underwent to more than one diagnostic procedures.

	Frequency (n)	%
Patients included in Internal Medicine area (dermatology and psychiatry included)	263	100.0
Cases resolved with just the consultation	93	35.4
EKG	54	20.5
Blood test	32	12.2
X-ray	59	22.4
US	34	12.9
CT	24	9.1
MRI	3	1.1
ABPM	5	1.9
24-H EKG monitoring	2	0.7
Cardiological consultation	15	5.7
Neurological consultation	4	1.5
Gastroenterological consultation	1	0.4
Dermatological consultation	1	0.4

EKG = electrocardiogram; US = Ultrasound scan; CT = Computed Tomography; MRI = Magnetic Resonance Imaging; ABPM = Ambulatory Blood Pressure Monitoring.

The speed of the process is one of the satisfaction indicators most frequently reported by patients. Visits to the PFAF that are concluded within two hours of admission account for 83.1% (665/800). 34 patients (4.25%) were referred to the hospital following initial assessment due to a complex or severe clinical presentation or the need for more complex diagnostic investigations not available in the facility. The longest waiting times were primarily due to the time required to obtain results from blood and diagnostic investigations and the availability of specialists for consultations. Regarding the cost incurred by patients to complete the diagnostic process, the average was €238,10 (DS 147,07) for the Internal Medicine area and €265,15 (DS 134,23) for the trauma-orthopaedic area. The cost of the service(s) is paid out of pocket by the patients, though it may be partially or fully reimbursed by their health insurance. The rates refer to the fee schedule for services in the private healthcare sector.

5. Discussion

The phenomenon of ED overcrowding has been analyzed from various perspectives to understand the dynamics and attempt to provide possible solutions [10]. The rise in ED visits contributes to congestion in public hospital services, com-

pounded by the fact that significantly large proportion of these visits involve clinical minor conditions. According to patient reports, the main reasons for choosing a private facility for urgent care are shorter waiting times for admission, personalized care pathways, the perception of high-quality treatment and the ability to undergo investigations, particularly diagnostic imaging, very quickly [9] [11]. Given that most visits to PFAF fall within the clinical area of orthopaedical trauma, the aim was to establish a high-quality care pathway featuring diagnostic imaging services throughout the entire duration of the PFAF's operating hours, as well as the necessary personnel to perform these procedures (radiology technicians), a radiologist to interpret the results and orthopedic consultation either on site or via teleconsultation. Forty percent of patients accessing PFAF are over 65 years old, demonstrating that for the elderly the grueling wait times in an ED, not only for the initial assessment but also for the resolution of clinical case issues, remain a major source of distress; ultimately, patients want a resolution and answer quickly. Another reason driving people to PFAF is the limited availability or absence of diagnostic tools within the Italian primary care setting (especially imaging and laboratory services) [12]. Furthermore, for healthcare professionals, ED overcrowding increases clinical risk, slows down time-critical care pathways, reduces adherence to guidelines and amplifies professional stress. The result is a high-pressure care environment that exposes staff to greater risks and contributes to increased conflict and burnout. Access to PFAF would also help reduce the phenomenon of patients leaving the ED after being triaged but before completing the diagnostic process, rates which, according to Agenas data, range from 10 to 25% depending on the Region [13]: some of these patients likely return home because the condition was probably not clinically significant; others likely chose to go to ED thinking they could quickly undergo a diagnostic investigation or medical consultation thereby shortening waiting lists; some patients ultimately decide to visit their family doctor (having rule him out *ab initio*): a recent study conducted by a group of general practitioners, analyzed 300 consecutive ED visits by their patients in province of Piacenza (Northern Italy) demonstrated the 87% of these visits occurred without prior contact with their general practitioner and that 67% of the visit were assigned a white or green triage code [14]. The percentage of low and medium acuity cases crowding ED, again according to Agenas data, ranges from 20 to 80% depending on the Region. Another point worth considering is that ED in large hospitals typically employ Emergency Medicine specialists, professionals who are in chronically short supply. Given that well over 50% of patient visits involve low to medium acuity cases, this significant proportion of patients could be managed by healthcare professionals other than Emergency Medicine specialists. What occurs daily in ED has a significant impact on healthcare staff, leading to reduced motivation and job satisfaction, increased burnout, and, not least, incidents of violence perpetrated by patients. For patients and their families, all of this translates into a critical phase in the relationship between the citizens and the Healthcare System; the experience and memory of time spent wait-

ing, especially under overcrowded conditions, risk eroding the citizen's trust in healthcare institutions [2]. This phenomenon now affects many economically developed countries; indeed, analyses reveal a multitude of contributing factors: increased life expectancy, a shortage of healthcare and human resources, a shift in patients' subjective perception of urgency and inappropriate use of ED by the public [15]-[18]. Consequently, PFAF services are primarily offered to patients with minor illnesses or injuries, helping to reduce the growing number of ED visits for urgent, though not life-threatening cases [19]. Overcrowding and inappropriate ED visits no longer appear to be issues linked solely to the patient but rather to the system as a whole.

6. Strengths

The study is the first descriptive analysis of accesses in a PFAF in Italy. It's a real-world analysis of 800 consecutive accesses respecting the random nature of the clinical cases. Furthermore, diagnostic and treatment pathways, as well as timelines and outcomes, were analyzed. This can be a model for other private centres wishing to establish a similar service, as it allows them to know in advance the human and material resources required to operate effectively and meet the needs and expectations of patients who choose a PFAF.

7. Limitations

One of the limitations of this study is that it was conducted in a single centre. No satisfaction survey was conducted to quantify patient feedback, covering both positive aspects and negative ones, which could be used to improve the service. The assessments that have been obtained are merely anecdotal in nature.

8. Conclusion

The speed at which clinical issues are resolved for patients with minor urgency codes is the primary reason for choosing PFAF, which are becoming increasingly widespread across the Country. An analysis of the data presented in this study provides insight into users' sociodemographic characteristics, the type of clinical issues bringing patients to these PFAFs, the care pathways, outcomes and costs. A network of local service providers, spanning both the public sector (such as Community Health Centers—Case di Comunità) and private sector (multi-specialty centres or private clinics) could help relieve congestion in ED. In 2025, there were 52,815 visits in ED of the Hospital in the City of Varese, of which 39.6% were classified as minor codes of severity ("white" and "green") (Data on file of Varese Hospital). The management of minor emergency cases by public and private healthcare facilities in the local area, while allowing citizens the freedom to choose where they receive care, can significantly impact overcrowding in ED. These 12-hour open facilities, staffed by medical and nursing personnel, have access to basic diagnostic services (laboratory, ultrasound and skeletal imaging) to help complete the diagnostic process. Furthermore, it would be advisable to expand the use of

video-visits or teleconsultations for initial clinical assessment, directing patients triaged as white- or green-code to local facilities equipped with basic diagnostic tools (including remote report interpretation). Ultimately, a unified digital and telephone based guidance system would be beneficial to direct citizens to the most appropriate service.

Acknowledgements

Special thanks to Malek Isber (General Manager) for enabling and facilitating the entire diagnostic and therapeutic process within the facility. Special thanks to radiologists (Pascal Lomoro, Massimo Paolucci Colico, Andrea Citterio) who, with their contribution, alongside the radiology technicians, made it possible to complete the diagnostic pathways for emergency cases.

Author Contributions

Conceptualization, methodology and writing Aurelio Sessa; **Review and validation** Claudia Soldati and Laura Formenti. All authors have read and agreed to the published version of the manuscript.

Informed Consent

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The data supporting this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

[1] Accordo tra ministero della salute, le regioni e le province autonome sul documento di linee guida sul sistema di emergenza sanitaria concernente: Triage ospedaliero (valutazione gravità all'ingresso) e chirurgia della mano e microchirurgia nel sistema dell'emergenza-urgenza sanitaria 8G.U. Serie Generale n 285 del7.12.2001. https://www.gazzettaufficiale.it/eli/id/2001/12/07/01A12203/sg

[2] Sartini, M., Carbone, A., Demartini, A., Giribone, L., Oliva, M., Spagnolo, A.M., *et al.* (2022) Overcrowding in Emergency Department: Causes, Consequences, and Solutions—A Narrative Review. *Healthcare*, **10**, Article 1625. https://doi.org/10.3390/healthcare10091625

[3] Savioli, G., Ceresa, I.F., Gri, N., Bavestrello Piccini, G., Longhitano, Y., Zanza, C., *et al.* (2022) Emergency Department Overcrowding: Understanding the Factors to Find Corresponding Solutions. *Journal of Personalized Medicine*, **12**, 279-292. https://doi.org/10.3390/jpm12020279

[4] Pitts, S.R., Pines, J.M., Handrigan, M.T. and Kellermann, A.L. (2012) National Trends in Emergency Department Occupancy, 2001 to 2008: Effect of Inpatient Admissions

versus Emergency Department Practice Intensity. *Annals of Emergency Medicine*, **60**, 679-686.e3. https://doi.org/10.1016/j.annemergmed.2012.05.014

[5] Pugliese, F.R. (2019) I veri problemi dell'emergenza sanitaria in Italia. https://www.itjem.org/2019/05/09//i-veri-problemi-dellemergenza-sanitaria-in-italia/

[6] He, J., Toloo, G., Hou, X. and FitzGerald, G. (2016) Qualitative Study of Patients' Choice between Public and Private Hospital Emergency Departments. *Emergency Medicine Australasia*, **28**, 159-163. https://doi.org/10.1111/1742-6723.12530

[7] FitzGerald, G., Toloo, G., He, J., Doig, G., Rosengren, D., Rothwell, S., *et al*. (2013) Private Hospital Emergency Departments in Australia: Challenges and Opportunities. *Emergency Medicine Australasia*, **25**, 233-240. https://doi.org/10.1111/1742-6723.12082

[8] Han, A., Ospina, M.B., Blitz, S., Strome, T. and Rowe, B.H. (2007) Patients Presenting to the Emergency Department: The Use of Other Health Care Services and Reasons for Presentation. *CJEM*, **9**, 428-434. https://doi.org/10.1017/s1481803500015451

[9] Walker, K. and Ben-Meir, M. (2017) Choosing Public or Private Emergency Departments in Australia. *Emergency Medicine Australasia*, **30**, 122-124. https://doi.org/10.1111/1742-6723.12879

[10] Asplin, B.R., Magid, D.J., Rhodes, K.V., Solberg, L.I., Lurie, N. and Camargo, C.A. (2003) A Conceptual Model of Emergency Department Crowding. *Annals of Emergency Medicine*, **42**, 173-180. https://doi.org/10.1067/mem.2003.302

[11] Shearer, F.M., Bailey, P.M., Hicks, B.L., Harvey, B.V., Monterosso, L., Ross-Adjie, G., *et al*. (2014) Why Do Patients Choose to Attend a Private Emergency Department? *Emergency Medicine Australasia*, **27**, 62-65. https://doi.org/10.1111/1742-6723.12330

[12] Siminski, P., Cragg, S., Middleton, R., Masso, M., Lago, L., Green, J., *et al*. (2005) Primary Care Patients' Views on Why They Present to Emergency Departments: Inappropriate Attendances or Inappropriate Policy? *Australian Journal of Primary Health*, **11**, 87-95. https://doi.org/10.1071/py05026

[13] AGENAS: Pronto Soccors. https://www.agenas.gov.it/component/content/article/1713-pronto-soccorso?catid=87&ltemid=

[14] Petraglia, D., Arbasi, M., Carusone, M., Moretto, M., Quarantelli, E. and Cupardo, M. (2025) Accessi inappropriati in pronto soccorso: Il ruolo della medicina generale. Studio osservazionale nella provincia di piacenza. *Rivista SIMG*, **32**, 30-32.

[15] Schehadat, M.S., Scherer, G., Groneberg, D.A., Kaps, M. and Bendels, M.H.K. (2021) Outpatient Care in Acute and Prehospital Emergency Medicine by Emergency Medical and Patient Transport Service over a 10-Year Period: A Retrospective Study Based on Dispatch Data from a German Emergency Medical Dispatch Centre (Off-Rescue). *BMC Emergency Medicine*, **21**, Article No. 29. https://doi.org/10.1186/s12873-021-00424-4

[16] Patton, G.G. and Thakore, S. (2013) Reducing Inappropriate Emergency Department Attendances—A Review of Ambulance Service Attendances at a Regional Teaching Hospital in Scotland. *Emergency Medicine Journal*, **30**, 459-461. https://doi.org/10.1136/emermed-2012-201116

[17] Veser, A., Sieber, F., Groß, S. and Prückner, S. (2015) The Demographic Impact on the Demand for Emergency Medical Services in the Urban and Rural Regions of Bavaria, 2012-2032. *Journal of Public Health*, **23**, 181-188. https://doi.org/10.1007/s10389-015-0675-6

[18] Jin, K., Zhang, H., Seery, S., Fu, Y., Yu, S., Zhang, L., *et al.* (2020) Comparing Public and Private Emergency Departments in China: Early Evidence from a National Healthcare Quality Survey. *The International Journal of Health Planning and Management*, **35**, 581-591. https://doi.org/10.1002/hpm.2968

[19] Chan, C., Lin, W., Yang, N. and Huang, H. (2013) The Association between the Availability of Ambulatory Care and Non-Emergency Treatment in Emergency Medicine Departments: A Comprehensive and Nationwide Validation. *Health Policy*, **110**, 271-279. https://doi.org/10.1016/j.healthpol.2012.12.003