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# Study on non-urgent emergency department visits in South Tyrol (Italy)

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| **Submission date**<br>10/09/2024 | **Recruitment status**<br>No longer recruiting | [_] Prospectively registered<br>[X] Protocol |
| **Registration date**<br>25/09/2024 | **Overall study status**<br>Completed | [_] Statistical analysis plan<br>[_] Results |
| **Last Edited**<br>06/10/2025 | **Condition category**<br>Other | [_] Individual participant data<br>[_] Record updated in last year |

**Plain English summary of protocol**

Background and study aims
Emergency departments (EDs) often become crowded due to patients seeking care for non-urgent issues. This may point to problems in accessing primary care services. Factors like convenience, age, and dissatisfaction with non-hospital care contribute to this. This study aims to understand how many of these non-urgent visits could have been avoided and to explore what social, demographic, and clinical factors influence patients to visit the ED unnecessarily.

Who can participate?
Adults aged 18 years or older who visit one of seven participating EDs in South Tyrol (Northern Italy) with non-urgent conditions ('blue' or 'green' triage levels according to Manchester Triage System) can participate if they consent.

What does the study involve?
Participants will answer a questionnaire about their reasons for visiting the ED and their previous use of community care services, including their General Practitioner. The triage nurses and medical doctors will also collect information about patients' condition and treatment. This data will be analyzed to identify factors associated with avoidable ED visits.

What are the possible benefits and risks for participants?
There are no direct benefits or significant risks to participants. However, the study could help improve healthcare services by reducing unnecessary ED visits in the future.

Where is the study run from?
The study will take place in seven public hospitals in the South Tyrolean Health Service, located in the Province of Bolzano-Bozen, northern Italy.

When is the study starting and how long is it expected to run for?
January 2024 to December 2025

Who is funding the study?
The study is funded from the Institute of General Practice and Public Health, Claudiana College of Health Professions, Lorenz Böhler Street 13, Bolzano - Bozen (BZ), 39100, Italy

Who is the main contact?
Dr Dietmar Ausserhofer, dietmar.ausserhofer@claudiana.bz.it

# Contact information

### Type(s)
Public, Scientific, Principal investigator

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# Additional identifiers

# Study information

### Scientific Title
The Care Accessibility and Reasons for Non-urgent Emergency Department Visits in South Tyrol (Italy): The multicenter cross-sectional CARES study

### Acronym
CARES

### Study objectives
This study aims (1) to describe the proportion of potentially avoidable, non-urgent ED visits; (2) to describe patients' motives (e.g., individual, system and cultural factors) for attending the ED for non-urgent visits; (3) to compare patients' socio-demographic and clinical characteristics between potentially avoidable and non-avoidable ED visits as judged by the healthcare personnel; and (4) to explore the associations between individual, system and cultural factors and avoidability of non-urgent visits to the ED.

### Ethics approval required
Ethics approval required

### Ethics approval(s)
Approved 28/06/2024, Medical Ethics Committee of the South Tyrolean Health Service (NOI Techpark, A6, A.-Volta-Straße 21, Bozen-Bolzano, 39100, Italy; +39 471 436191; IRTS@sabes.it), ref: Nr. 41-2024

### Primary study design
Observational

### Study design
Observational cross-sectional study

### Study type(s)
Other

### Health condition(s) or problem(s) studied
Adult patients accessing emergency department for non-urgent visits.

### Interventions
The enrolled participants will be asked to complete a paper questionnaire designed to collect information on their symptoms, self-perceived urgency, and motives for attending the ED. At the same time, the triage nurse will start completing a paper questionnaire to provide information about the triage (e.g., MTS priority level and specific flow chart). At discharge, the medical doctor will fill out the diagnoses, and both the triage nurse and medical doctor will assess the avoidability of the ED visit.

### Intervention Type
Other

### Primary outcome(s)
Potentially avoidable ED visits. There is no universally accepted definition of a potentially preventable ED visit. In our study we define potentially avoidable ED visits those that are (1) triaged as non-urgent (i.e., priority level "blue" or "green" according to the MTS), and (2) where the care provided could have been treated safely and effectively in a primary care setting (e.g., GP). Accordingly, the healthcare professionals in the ED (i.e., the triage nurse and the medical doctor in charge of the patient) will independently assess the patient at discharge if the visit was potentially avoidable (1=yes, 2=no) considering the patient’s somatic, mental, or social problems in accessing the ED. Measured using patient records at the end of the study.

### Key secondary outcome(s)
Patients’ self-reported access to primary care services (i.e., contact with or visit to the GP) for the current health problem prior to attending the ED (1=yes, 2=no). Measured using patient records at the end of the study.

### Completion date
31/12/2025

## Eligibility

### Key inclusion criteria
1. Adult patients (≥ 18 years).
2. Clinical conditions triaged as "non-urgent" ("blue") or "normal" ("green") according to the Manchester Triage System.
3. Able to communicate in either German or Italian.
4. Consent to participate in the study.

**Participant type(s)**
Patient

**Healthy volunteers allowed**
No

**Age group**
Adult

**Lower age limit**
18 Years

**Upper age limit**
100 Years

**Sex**
All

**Total final enrolment**
660

**Key exclusion criteria**
1. Minor patients (<18 years old).
2. Patients with high acuity triaged as "immediate" ("red"), "very urgent" ("orange"), or "urgent" ("yellow").
3. Non-triaged patients requiring immediate or emergency treatment without waiting time.
4. Patients triaged with fast track (i.e., specialized visits).
5. Additionally, patients meeting one or more of the following criteria will also be excluded:
5.1. Cognitive impairment (e.g., patients with any condition that results in impaired decision-making that may affect informed consent, such as patients with dementia or psychiatric conditions).
5.2. Inability to communicate verbally in German or Italian.
5.3. Lack of consent (e.g., patients who refused to participate or were unable to consent).
5.4. Direct referral to another outpatient clinic or department within the hospital.

**Date of first enrolment**
09/09/2024

**Date of final enrolment**
31/12/2024

# Locations

**Countries of recruitment**
Italy

**Study participating centre**
**South Tyrolean Healthcare Trust - Hospital of Bolzano-Bozen**
Lorenz-Böhler-Str. 5

Bozen-Bolzano
Italy
39100

**Study participating centre**
**South Tyrolean Healthcare Trust - Hospital of Merano-Meran**
G.-Rossini-Straße 5
Meran
Italy
39012

**Study participating centre**
**South Tyrolean Healthcare Trust - Hospital of Bressanone-Brixen**
Dantestraße 51
Bressanone-Brixen
Italy
39042

**Study participating centre**
**South Tyrolean Healthcare Trust - Hospital of Brunico-Bruneck**
Spitalstraße 11
Brunico-Bruneck
Italy
39031

**Study participating centre**
**South Tyrolean Healthcare Trust - Hospital of Silandro-Schlanders**
Krankenhaus-Straße 3
Silandro-Schlanders
Italy
39028

**Study participating centre**
**South Tyrolean Healthcare Trust - Hospital of Vipiteno-Sterzing**
Margarethen-Straße 24
Vipiteno-Sterzing
Italy
39049

**Study participating centre**
**South Tyrolean Healthcare Trust - Hospital of San Candido-Innichen**
Freising-Straße 2
San Candido-Innichen
Italy
Freising-Straße 2

# Sponsor information

**Organisation**
Institute of General Practice and Public Health (University Center for Healthcare Professions)

# Funder(s)

**Funder type**
University/education

**Funder Name**
Institute of General Practice and Public Health (University Center for Healthcare Professions)

# Results and Publications

**Individual participant data (IPD) sharing plan**
The data presented in this study will be available upon reasonable request from the corresponding author. The data are not publicly available due to language and ethnicity reasons in the politically autonomous state of the Italian region, Trentino – Alto Adige.
Dr Dietmar Ausserhofer, dietmar.ausserhofer@claudiana.bz.it

**IPD sharing plan summary**
Available on request

**Study outputs**

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|---|---|---|---|---|
| Protocol article | | 02/10/2025 | 06/10/2025 | Yes | No |