



BACKGROUND

- At the point of entry a patient in acute care presents with a symptom or a symptom complex.
- The diagnosis (even tentative diagnosis) is the result of a process that includes anamnesis, examination and diagnostics.
- Example: A patient doesn't enter an emergency department with pneumonia but with shortness of breath, coughing or fever.
- Collection of standardised **presenting complaints** is essential for symptom-based analyses.

Since no German classification system was available we adopted a presenting complaint list (PCL) developed in Canada. **We evaluate the implementation of presenting complaints in one emergency department and report first results.**

METHODS

The PCL was integrated into the electronic medical record system of an emergency department (36,000 patients p.a.). During administrative admission, one presenting complaint code was assigned. The receptionists did not receive special training regarding ambiguous cases.

After eight months we performed an exploratory analysis consisting of descriptive statistics and association with triage category and patient hospitalization. In addition we explored the underlying diagnoses of selected presenting complaints.

RESULTS

- 26,330 patients included in analyses (~3,300/month)
- Male: 52.4% (mean age 48.8 years)
- Female: 47.6% (mean age 53.9 years)
- **Top 5 presenting complaints:**
 - Upper extremity pain (10.9%)
 - Lower extremity pain (10.9%)
 - Abdominal pain (7.0%)
 - Upper extremity injury (5.4%)
 - Chest pain-cardiac features (5.4%)
- ~70% of all cases were classified using the 20 most common presenting complaint codes
- "Unknown" cases (10.1% in total, <5% after 6 months)

Tab. 1: Selected presenting complaints with triage category and hospitalization rate

Complaint	Code	Frequency	Triage (MTS)	Ambulant	Admission
Extremity pain and injuries	554, 555, 556, 557	7,757 (29.5%)	69.9% non-urgent ¹	75.1%	14.0% 1.5% ICU
Abdominal pain	251	1,842 (7.0%)	64.9% non-urgent ¹	46.1%	49.7% 2.7% ICU
Shortness of breath	651	1,001 (3.8%)	52.5% urgent ²	26.0%	70.7% 16.0% ICU
Chest pain-cardiac features	003	981 (3.7%)	83.9% urgent ²	22.6%	74.3% 53.3% ICU
Extremity weakness/symptoms of CVA or TIA	409	625 (2.4%)	87.8% urgent ²	10.5%	85.2% 60.6% ICU

¹MTS acuity scale green/blue

²MTS acuity scale yellow/orange or immediate contact with physician

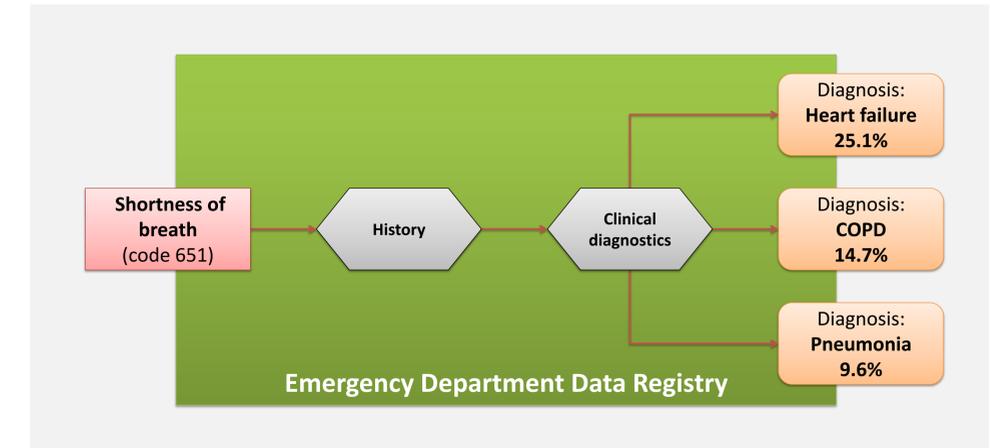


Fig. 1: Presenting complaint "shortness of breath" and underlying admission diagnosis

DISCUSSION

- The German PCL enables symptom-based analysis of the health care provided in emergency departments.
- Containing 171 PCs, this classification can be implemented without providing extensive staff training.
- However, basic instructions should be offered to reduce the rate of cases coded as unknown.

OUTLOOK

Additional to science, health surveillance and quality management, coded presenting complaints may be used for standardisation of care processes, such as clinical pathways.

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