

Early Outpatient Follow-Up and reduced Health Care Resource Utilization in Acute Heart Failure in Germany: A descriptive Analysis

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BACKGROUND



Acute heart failure (AHF) is a leading cause of hospitalization across Europe, with substantial clinical and economic burden¹. In Germany, AHF contributes significantly to healthcare resource use, including frequent readmissions and extended work absences among working-age patients. Timely outpatient follow-up after AHF discharge is recommended to improve outcomes², yet real-world adherence and its impact remain poorly understood. This descriptive study aimed to characterize healthcare resource utilization and work-related functional impact in patients hospitalized for AHF in Germany.

METHODS



Design:

- Retrospective real-world evidence study using the German Analysis Database (2014–2022)³.

Population:

- Adults with a **primary AHF diagnosis (ICD-10-GM codes: I50, I11.0, I13.0, I13.2, I42)**.
- Patients with **secondary AHF diagnosis** admitted to cardiology, internal medicine, or emergency care.
- Patients with myocardial infarction (I21) receiving mechanical circulatory support.
- Patients who die within the reporting or follow-up year are **excluded** from analysis.
- Patients were categorized into contact groups based on the timing of their first follow-up contact within 90 days post-discharge:
Early contact was defined as **≤7 days**, and **late contact** as **>7 days**.

Index hospitalization (Figure 1):

- First AHF admission after ≥ 365 days without an AHF-related inpatient stay.

Outpatient follow-up (Figure 1):

- Outpatient follow-up within 90 days after AHF-related hospitalization was based on documented I50 diagnosis or, if unavailable, broader circulatory diagnoses (ICD Chapter IX).

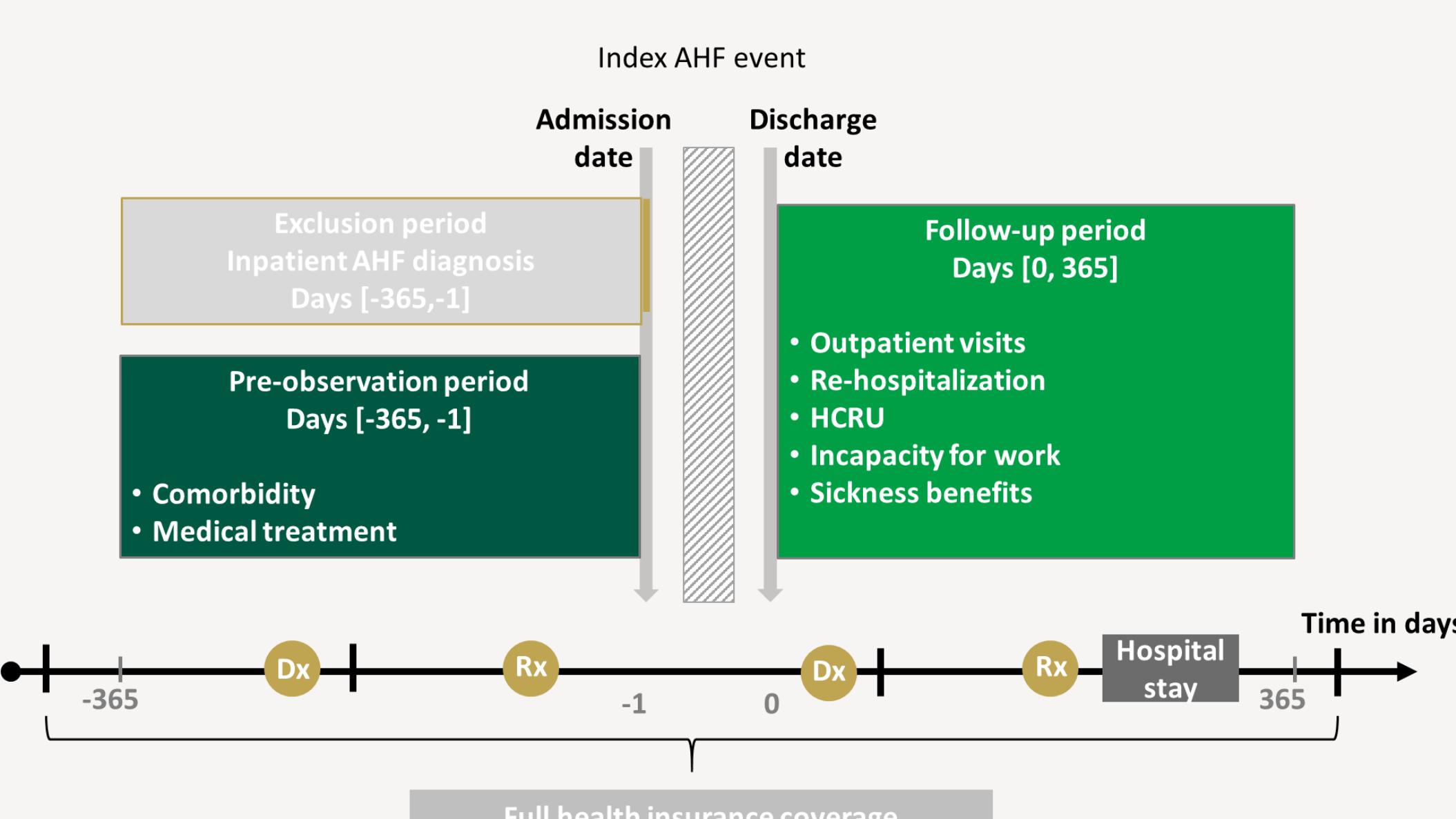


Figure 1 Study design overview. The follow-up period (Days 0 to 365) captured outcomes including outpatient visits, rehospitalizations, HCRU, Incapacity to work and sickness benefits. Continuous full health insurance coverage was required throughout the observation window.

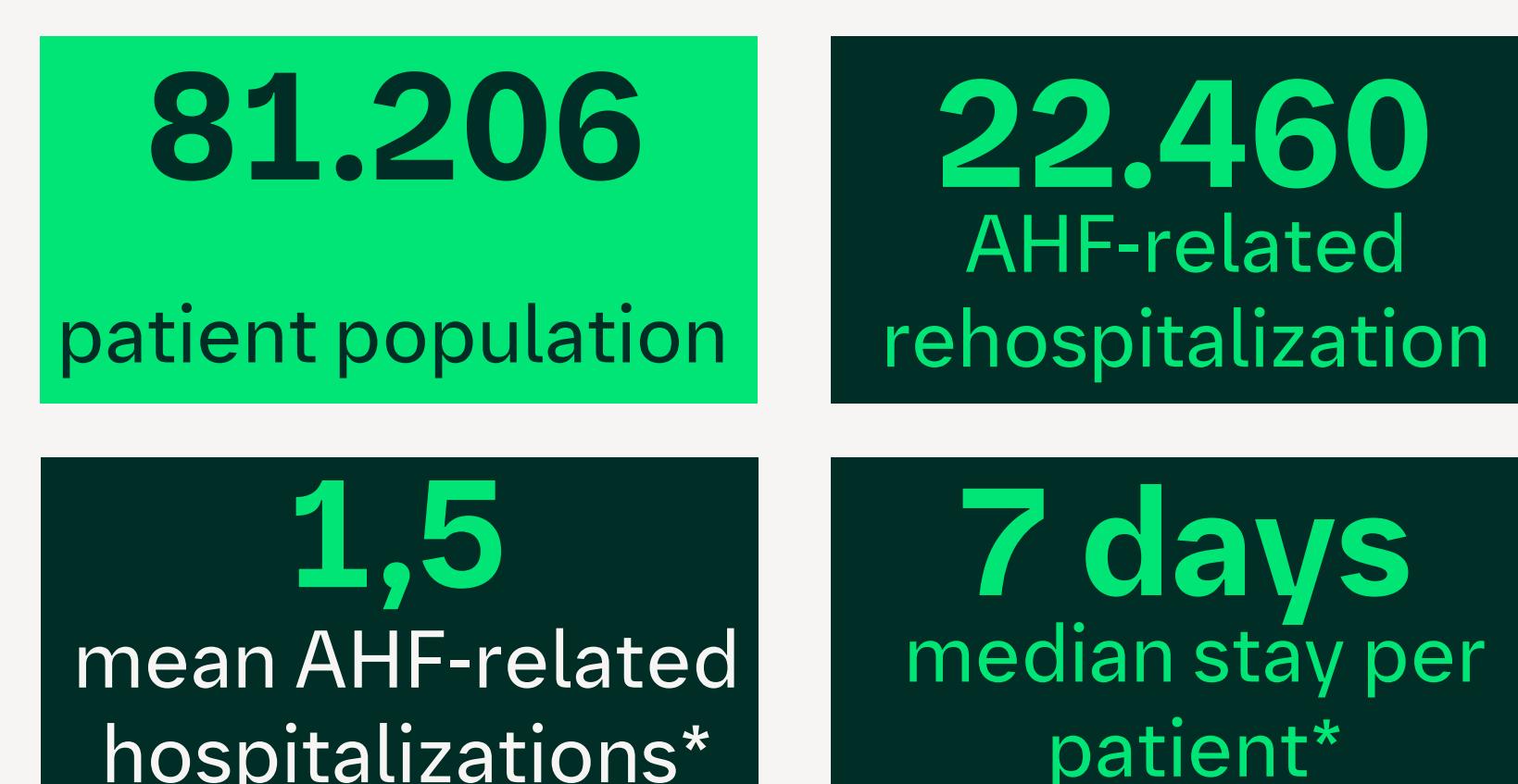
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ACKNOWLEDGEMENTS AND DISCLOSURES

The authors meet criteria for authorship as recommended by GPP and the International Committee of Medical Journal Editors (ICMJE). Gesundheitsforen Leipzig GmbH provided writing, editorial support, and formatting assistance, which was contracted and funded by BI. BI was given the opportunity to review the poster for medical and scientific accuracy as well as intellectual property considerations. The study was supported and funded by BI.

RESULTS

AHF-related rehospitalizations



* Only including patients with at least one re-hospitalization



28% of AHF-patients experienced at least one AHF-related hospitalization. Of those, 97% received follow-up in the outpatient sector.

Incapacity to work

18%
of patients aged ≤ 65 years
received AHF-related
incapacity to work

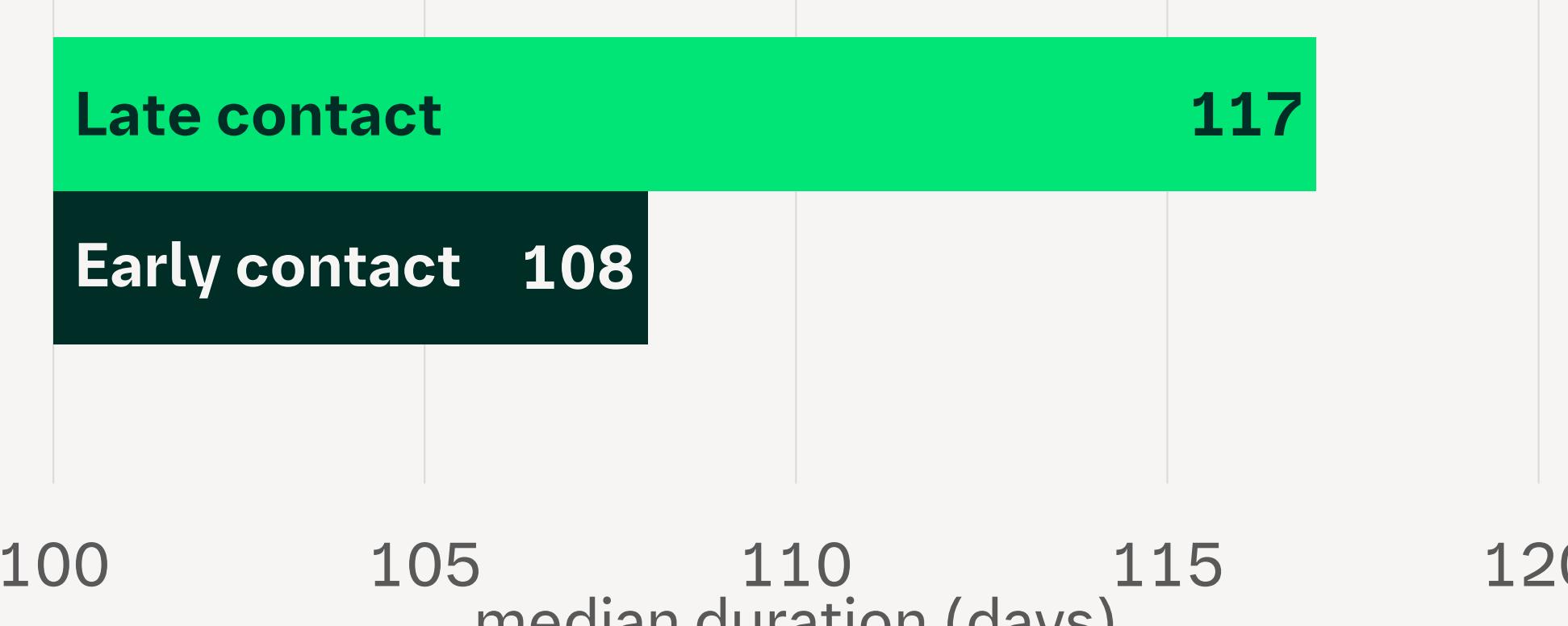


Figure 2 Median duration in days for eligible AHF patients with at least one AHF-related incapacity-to-work claim, by follow-up contact group.

Of 23,847 AHF patients aged ≤ 65 years, 4,421 had at least one documented AHF-related incapacity-to-work claim. The median duration of incapacity to work was **9 days longer** for patients with **late follow-up** contact compared to **early follow-up** contact.

Sickness benefits

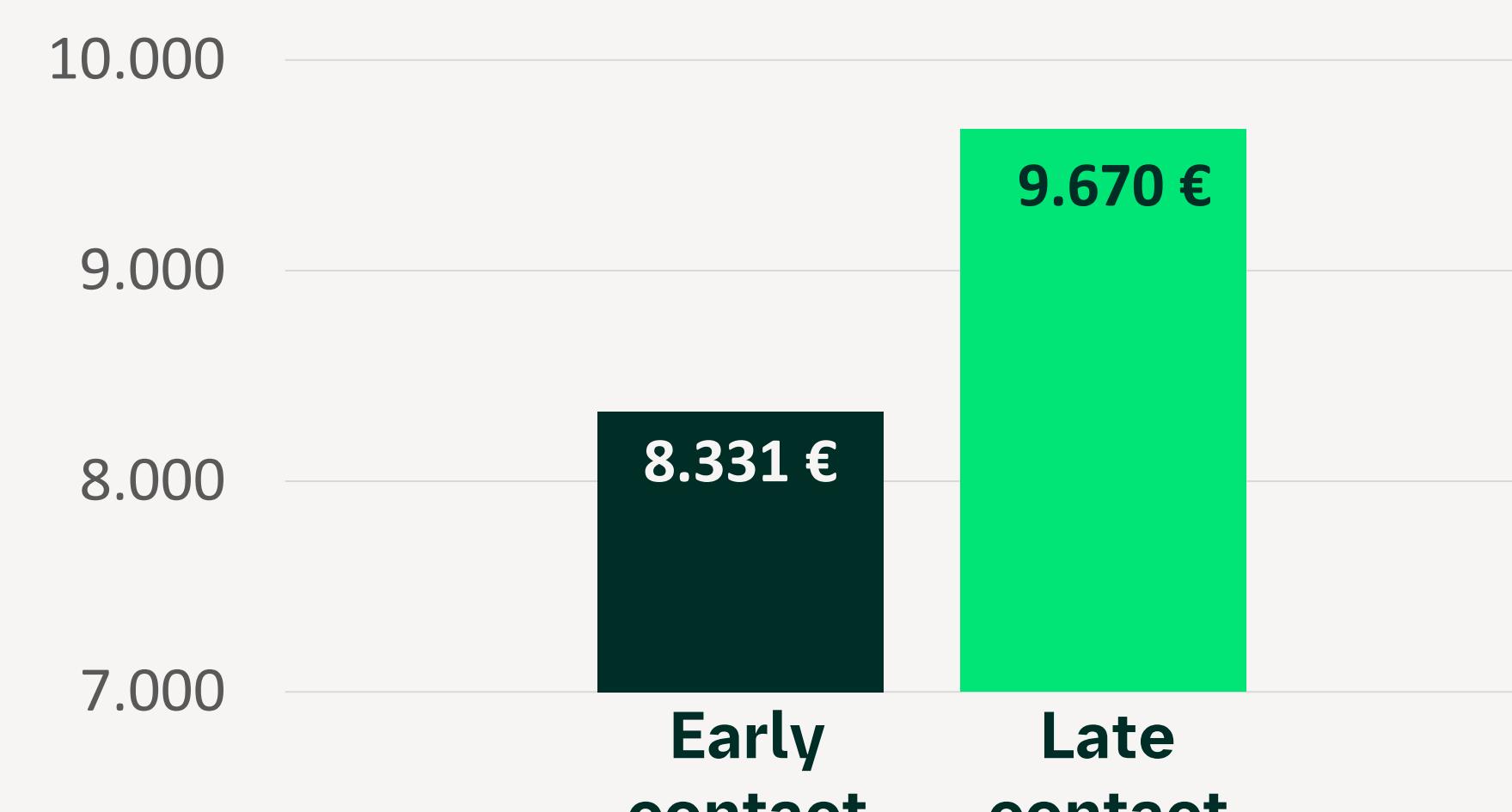


Figure 3 Median sickness benefit received among eligible patients with at least one payout, by follow-up contact group.

Of 14,639 AHF patients aged ≤ 65 years entitled to a sickness benefit, 3,122 received at least one. The median benefit reimbursement difference between groups was approx. **€1,300** per patient.

21%
of AHF patients aged ≤ 65 years received at least one sickness benefit

CONCLUSIONS



These findings highlight the substantial burden of AHF and reveal observed differences in reported outcomes between early and late outpatient follow-up groups.



Timely follow-up may help reduce healthcare and work-related burden, warranting further investigation.

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