Availability of sexual orientation and gender identity (SOGI) data in a cohort of transgender and gender diverse people: An analysis of electronic health records.

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BACKGROUND

- Despite documented disparities and unique care needs, high-quality data that can be used to address unanswered questions specific to the health of transgender and gender diverse (TGD) people are often lacking.
- Barriers to conducting high-quality TGD health studies and providing comprehensive care include a lack of systematic collection of population-level sexual orientation and gender identity (SOGI) data.
- Electronic health records (EHR) offer a unique opportunity to systematically collect SOGI data.
- **The objectives of this study were to examine the prevalence and determinants of SOGI reporting in an EHR-based cohort of TGD people.**

METHODS

- We identified TGD people with and without SOGI documentation enrolled in Kaiser Permanente (KP) Georgia (GA), Mid-Atlantic States (MAS), Northern California (NC) and Southern California (SC) health plans between 01/01/2022-12/31/2023.
  - TGD status was determined using validated clinical notes, relevant diagnostic codes, and SOGI information.
- **Outcome:** Presence of SOGI documentation in EHR (Y/N)
- **Independent variables**
  - Demographics: Age (<20, 20-39, 40-49, 50-59, and ≥60 years), sex assigned at birth (female, male), and race and ethnicity (non-Hispanic Asian, non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Other, and Unknown)
  - Study site: KPGA, KPMAS, KPNC, and KPSC
  - Socioeconomic status: Medicaid coverage (Y/N) and residence in a poverty area (defined as a neighborhood with >20% households with incomes below the federal poverty cut-off)
  - Charlson comorbidity index (none, 1, and ≥2)
  - Healthcare use: Average number of care encounters (e.g., inpatient, outpatient and ED) per year (<10, 10-29, and ≥30 encounters)
- **Statistical analysis**: Log-binomial regression

RESULTS

71% of 23,060 TGD persons had SOGI data in the EHRs. Documentation varied by sociodemographic, study site, and clinical factors.

Table 1. Descriptive statistics by SOGI status.

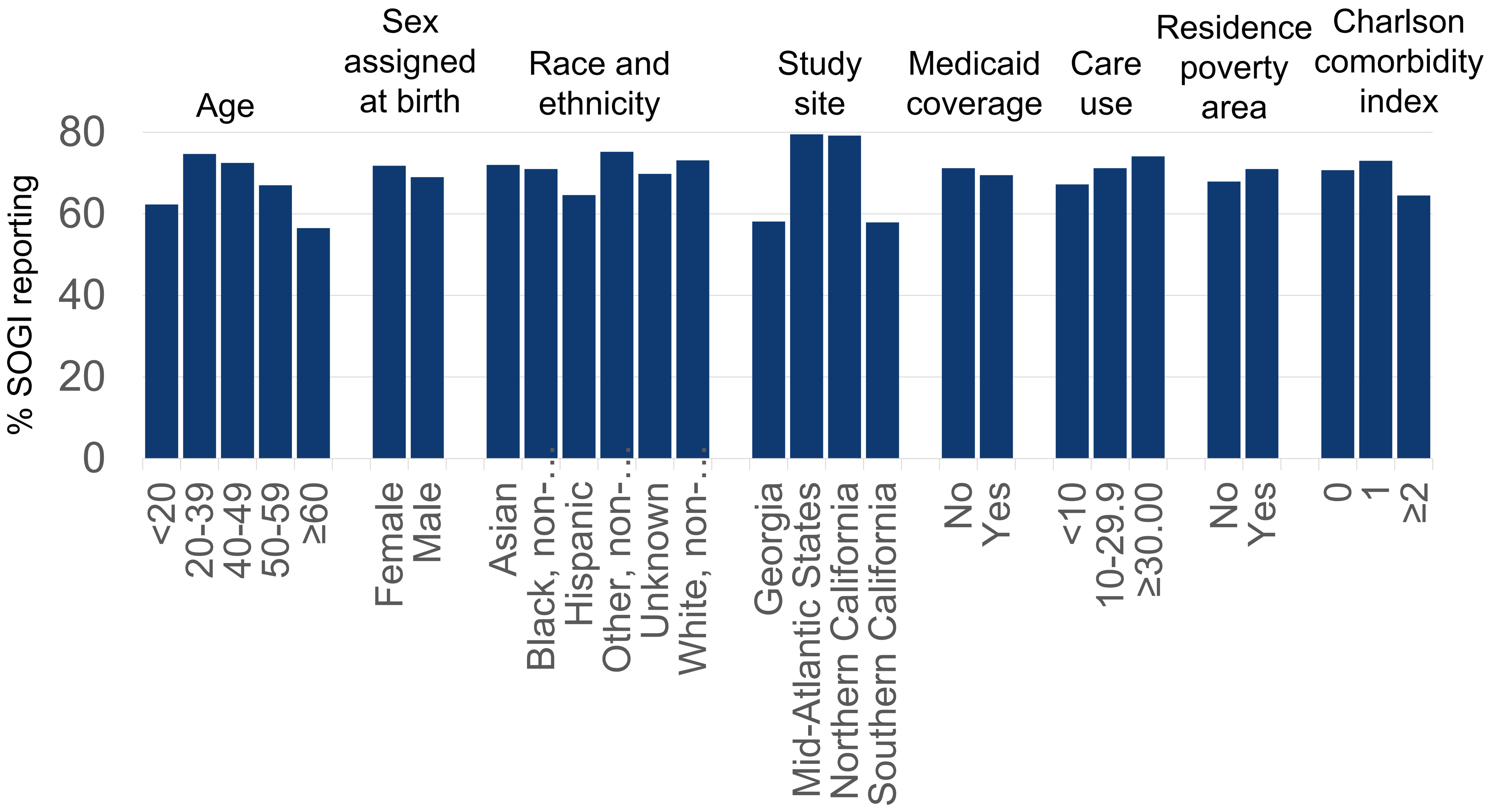
Characteristics	SOGI N=16,312 (%)	No SOGI N=6,748 (%)
<40 years of age	81.3	77.4
Female sex assigned at birth	62.1	58.8
Hispanic ethnicity	21.8	28.9
KPNC study site	61.1	38.8
Medicaid coverage	25.5	27.0
<10 encounters/year	31.5	37.1
Residence in a poverty area	90.5	89.1
No comorbidities	79.4	79.4

Table 2. Prevalence ratios of factors statistically significantly associated with SOGI reporting.

Characteristics	PR (95% CI)
Age, years – Reference: <20	
20-39	1.21 (1.18, 1.24)
40-49	1.17 (1.13, 1.21)
50-59	1.10 (1.06, 1.15)
≥60	0.93 (0.88, 0.99)
Sex assigned at birth – Reference: Female	
Male	0.98 (0.97, 1.00)
Race and ethnicity – Reference: White	
Hispanic	0.97 (0.95, 0.99)
Study site – Reference: KPNC	
KP Georgia	0.72 (0.67, 0.77)
KPSC	0.73 (0.71, 0.74)
Medicaid coverage – Reference: No	
Yes	0.98 (0.96, 1.00)
Encounters/year – Reference: <10	
10-29.9	1.08 (1.06, 1.10)
≥30.00	1.16 (1.14, 1.19)
Residence in poverty area – Reference: No	
Yes	1.00 (0.97, 1.03)
Charlson comorbidity index – Reference: None	
≥2	0.95 (0.92, 0.99)

Statistical significance determined at $p<0.05$; Abbreviations: PR – prevalence ratio, CI – confidence interval

Figure 1. Percent SOGI reporting in TGD people at KPGA, KPMAS, KPNC, and KPSC.



SUMMARY

- A total of 23,060 TGD persons enrolled in KP healthcare systems were included in this analysis, with 71% (n=16,312) having SOGI documentation in the EHRs.
- The prevalence of SOGI documentation varied by age, sex assigned at birth, race and ethnicity, study site, socioeconomic status, and clinical factors in adjusted models. For example:
  - Compared with the youngest (<20 years) age group, prevalence of documented SOGI status was higher in adults 21-39, 40-49, and 50-59 years of age but lower in older cohort members.
  - Compared with non-Hispanic White members, Hispanic TGD members had a lower prevalence of SOGI documentation in the EHR.

STRENGTHS AND LIMITATIONS

- Strengths include large sample size and uncovering factors associated with SOGI documentation in the EHRs of TGD individuals.
- The main limitation was reduced generalizability to non-integrated healthcare settings.

CONCLUSIONS

- This study provides new insights into SOGI documentation in the EHR of integrated healthcare systems in a large population of TGD people:
  - We found that the percentage of TGD people that had SOGI documentation in the EHR (71%) was well above national averages (23-37%)
  - We identified several sociodemographic and clinical factors associated with SOGI reporting in the EHR.
- Health systems should prioritize systematic collection of SOGI information in the EHR and emphasize equitability of reporting to reduce disparities.

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