

Frequency of and Preferences for Communication Between Inpatient Teams and Primary Care Providers

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Background

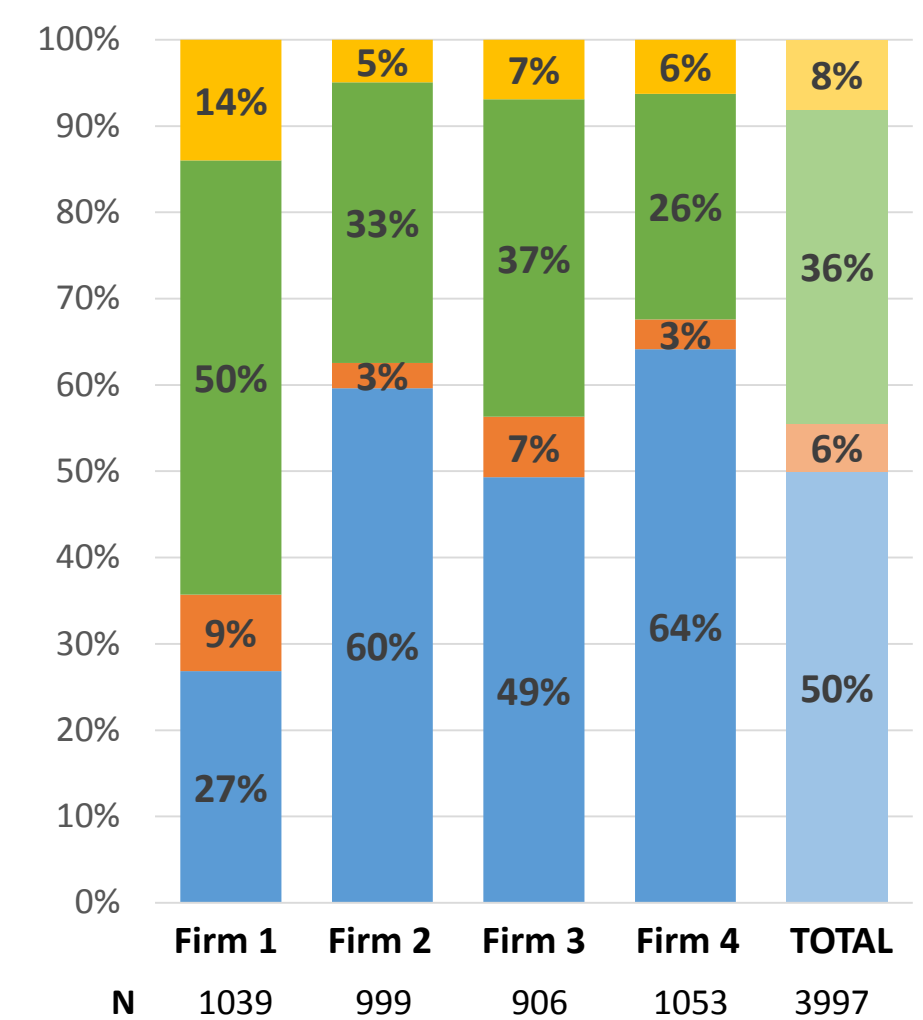
- Poor transitions of care from hospital to the community are associated with medication errors, readmissions, and other negative patient outcomes.
- Hospital discharge summaries may be insufficient as the only communication between inpatient teams and primary care providers (PCPs)
- Direct communication (face-to-face, phone, or email) between inpatient teams and PCPs before discharge may improve the transition of care
- We determined the frequency of direct communication on four general medicine teaching services (Firms), and surveyed three groups of PCP's about their experience with and preferences for communication with department of medicine inpatient teams at The Johns Hopkins Hospital (JHH)

Methods

- House staff must answer a question within the electronic health record (EHR) about direct communication in order to discharge patients. Answers were tallied for all Firm discharges between January and November of 2015
- Three PCP groups with frequent JHH admissions and accessible directors were surveyed: a group of academic PCPs affiliated with JHH (Acad-Affil.), a group of community PCPs affiliated with JHH (Comm-Affil.), and a group of community PCPs unaffiliated with JHH (Comm-Unaffil.), as outlined in Table
- Clinic directors emailed a 15 question web-based survey to individual providers
- Data analysis by chi-squared or Fischer's exact comparisons (based on sample sizes) performed in JMP 12

Results

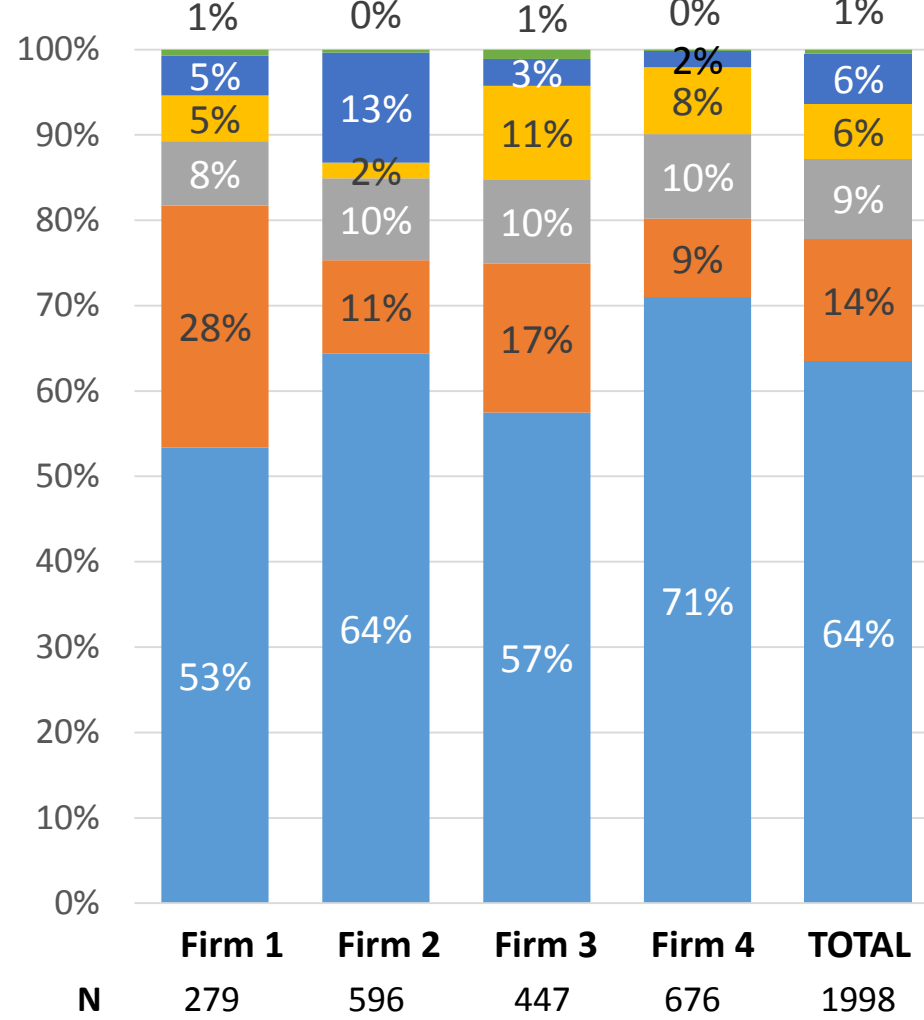
Fig 1a: Direct communication on Firms Between Jan and Nov 2015



■ Unsure if communication with outpatient provider was attempted
■ Successful communication with outpatient provider
■ Attempted but unsuccessful communication with outpatient provider
■ Communication with outpatient provider not attempted

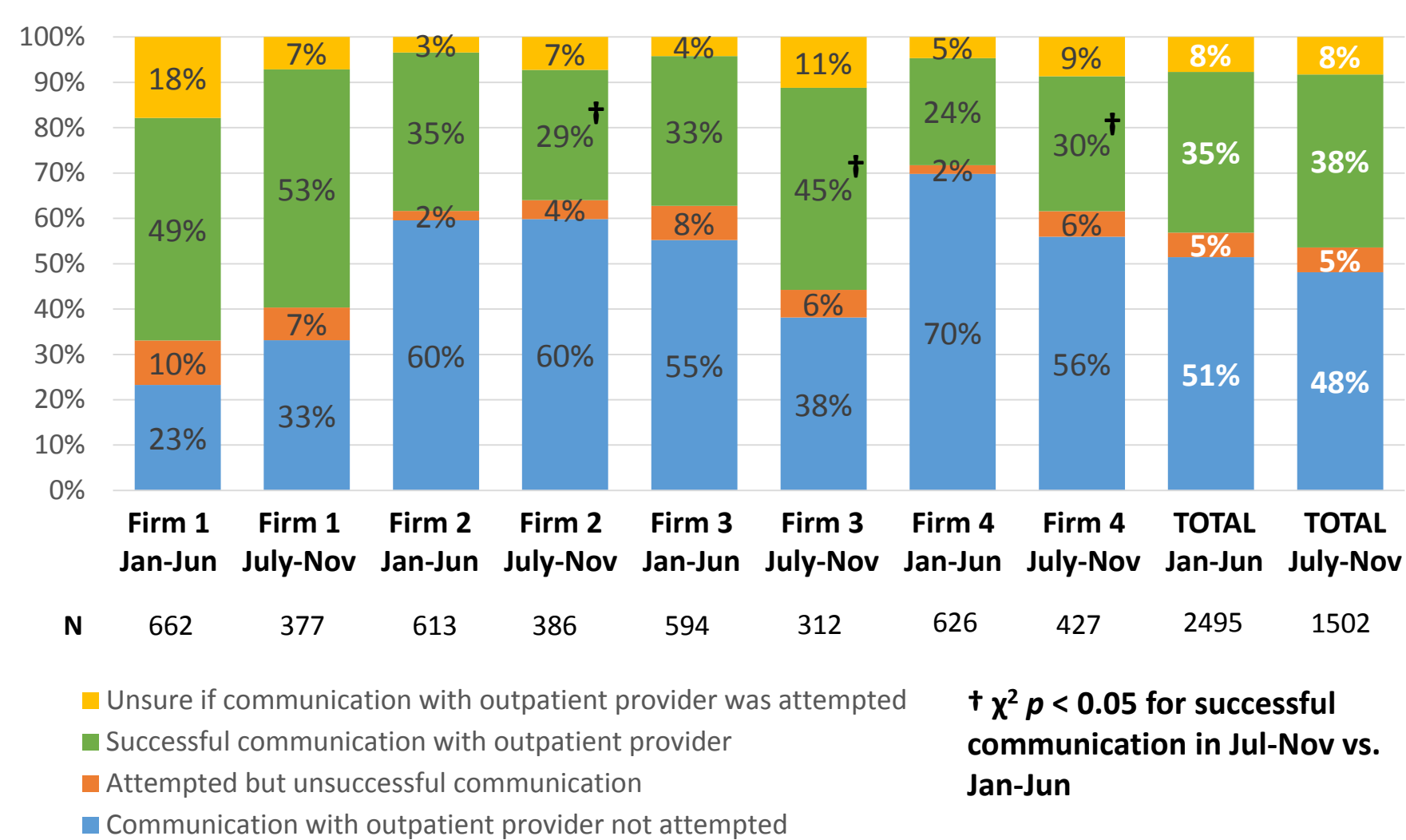
$\chi^2 p < 0.001$ for difference in % successful communication by Firms

Fig 1b: Reasons for "Direct Communication Not Attempted"



■ Not Needed
■ Other
■ No Response
■ Outpatient provider is within the Hopkins system
■ Patient does not have an outpatient provider
■ Discharge worksheet/summary will be adequate

Fig 2: Direct Communication by Firms Pre and Post July 1st Staff Transition



■ Unsure if communication with outpatient provider was attempted
■ Successful communication with outpatient provider
■ Attempted but unsuccessful communication
■ Communication with outpatient provider not attempted

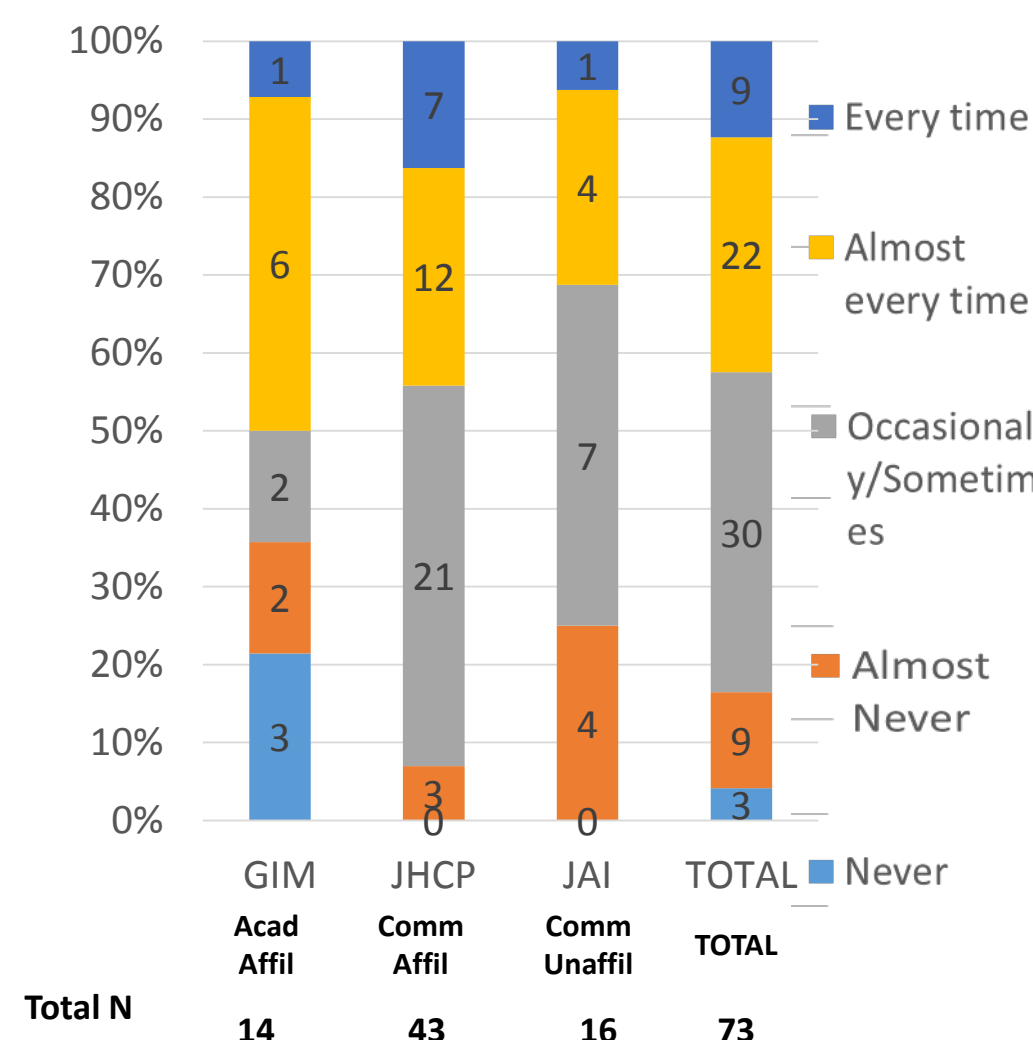
$\dagger \chi^2 p < 0.05$ for successful communication in Jul-Nov vs. Jan-Jun

Table: PCP Group Characteristics

Group	Clinic sites	Tech
Academic-Affiliated (Acad-Affil)*	Baltimore City (1) and County (1) (All sites surveyed)	Epic™
Community-Affiliated (Comm-Affil)	Throughout MD (33), DC (2) and VA (1) (All sites surveyed)	Epic™
Community-Unaffiliated (Comm-Unaffil)	Baltimore City (4) (All sites surveyed)	Paper records

* Respondents are academic physicians who are generally engaged in patient care with less than 50% of their annual effort

Fig 4: PCP responses to how often they are notified of patient's admission prior to discharge



χ^2 not significant for difference between groups whether notified occasionally or less frequently vs. notified almost every time or more frequently

Fig 3: Survey Responses (N) by PCP Group

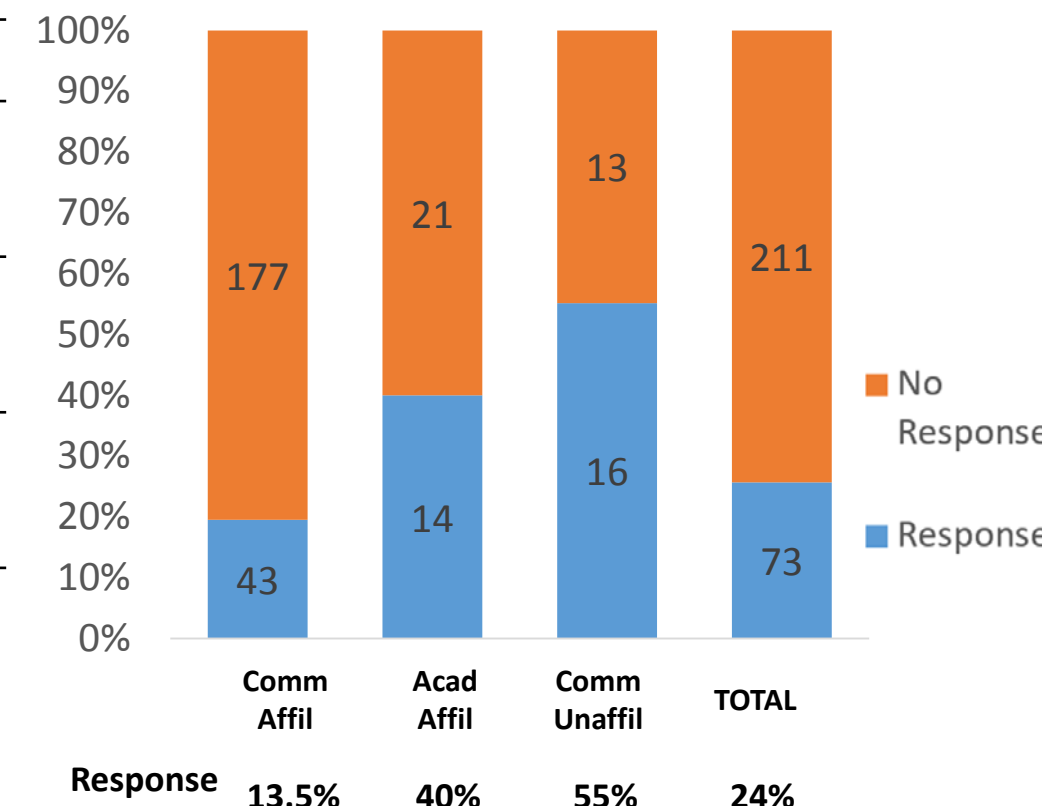
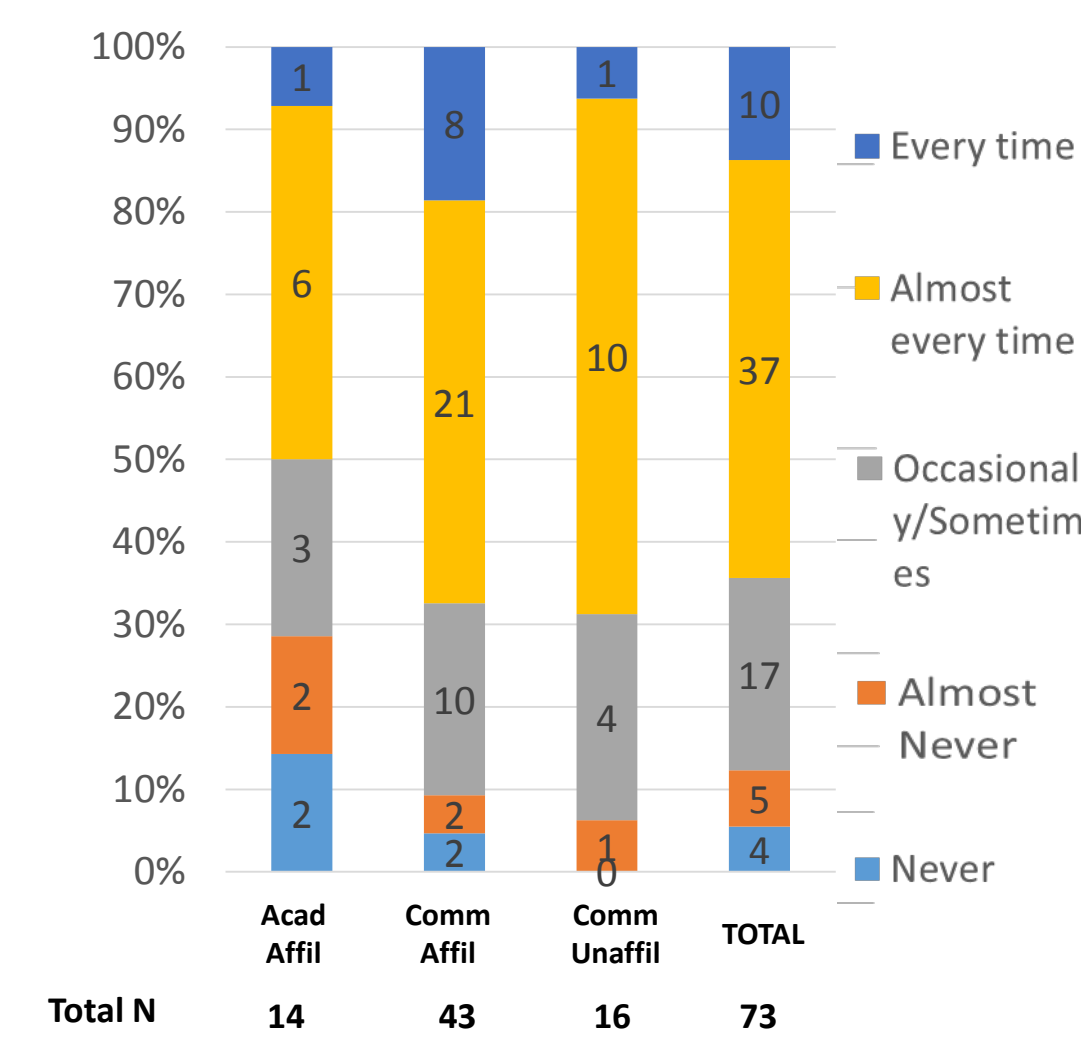
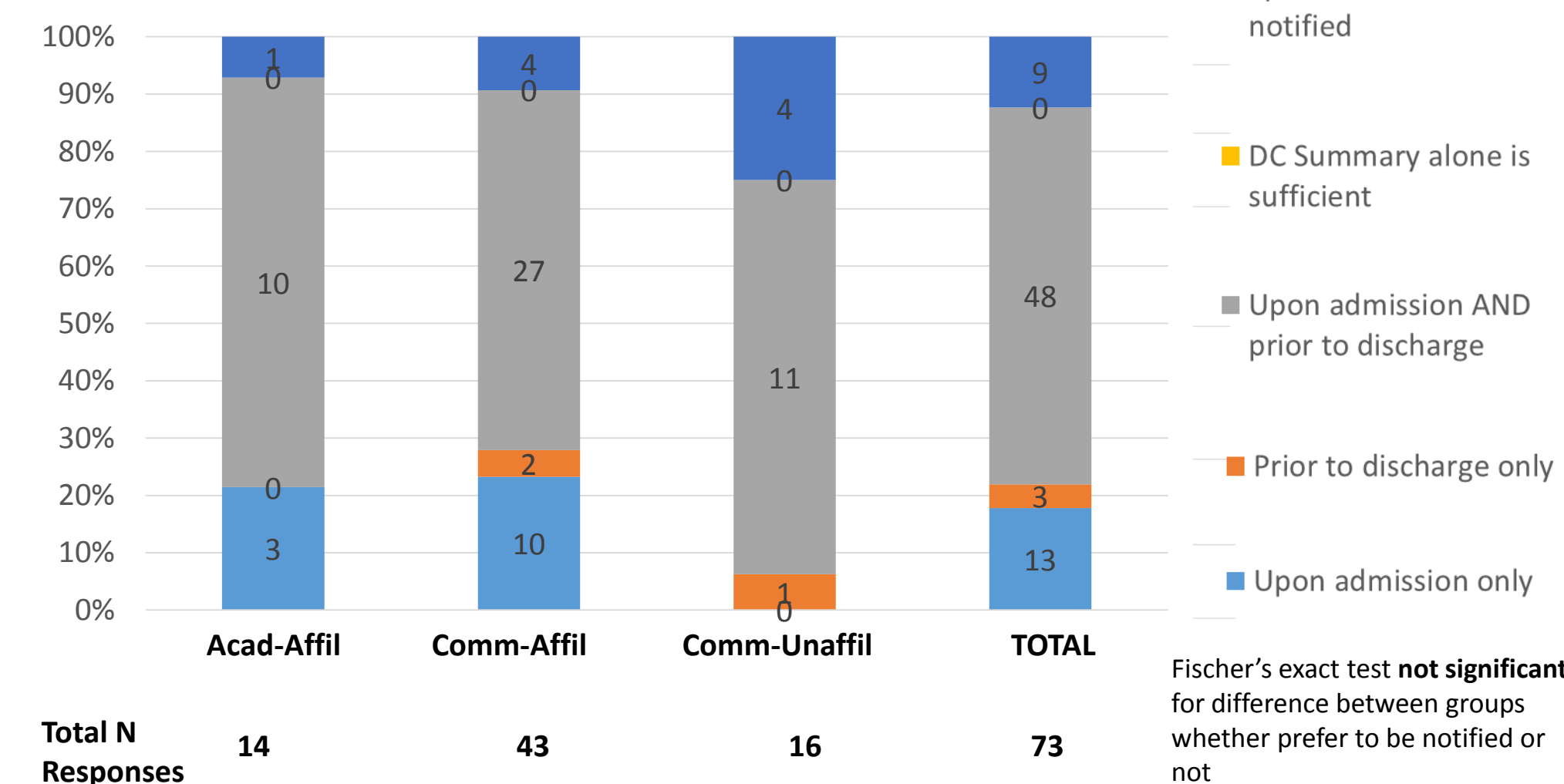


Fig 5: PCP responses to how often they receive a discharge summary



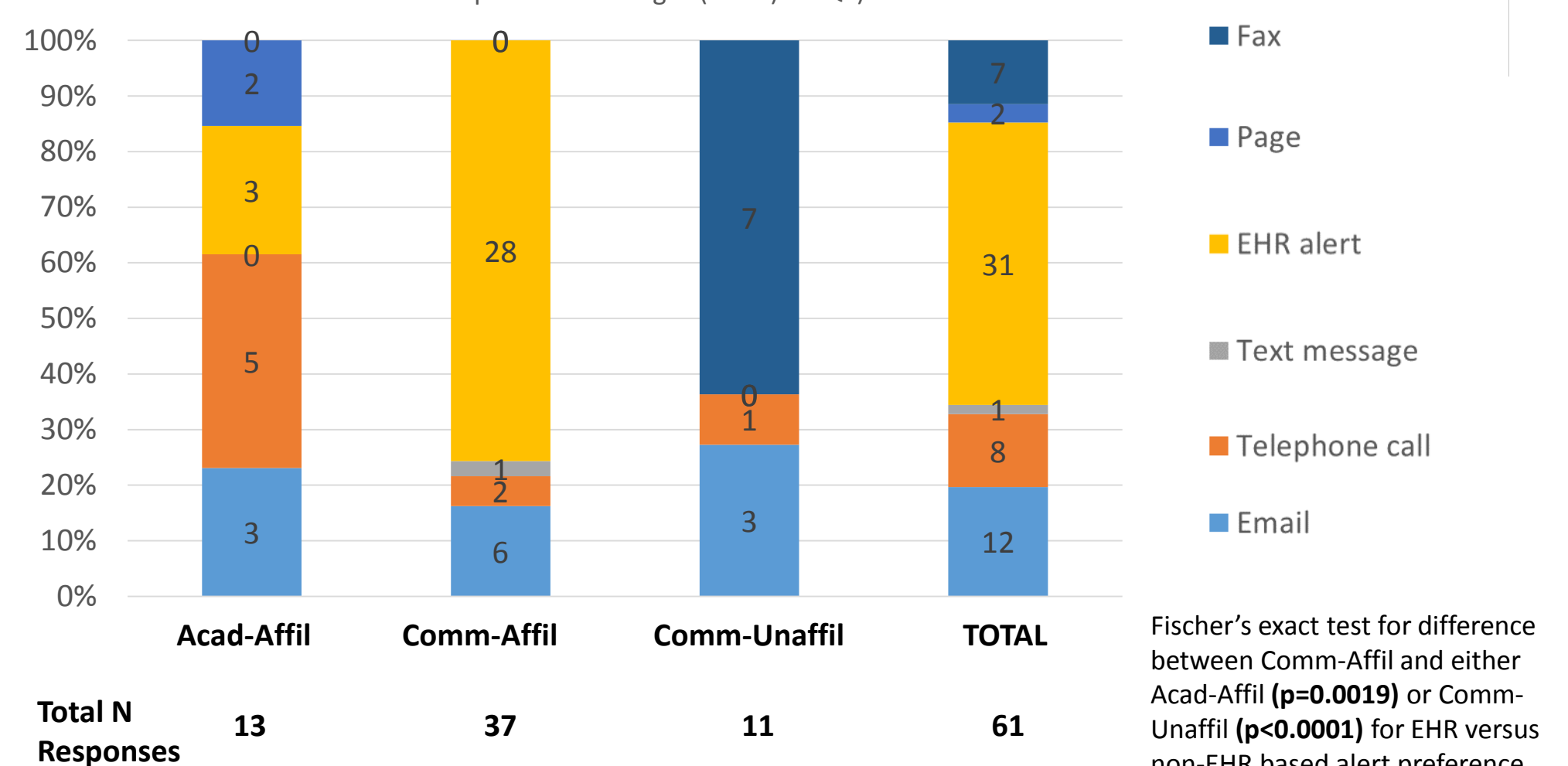
χ^2 not significant for difference between groups in receiving discharge summary occasionally or less frequently vs. every or almost every time

Fig 6: PCP preferences for when to be notified of admission



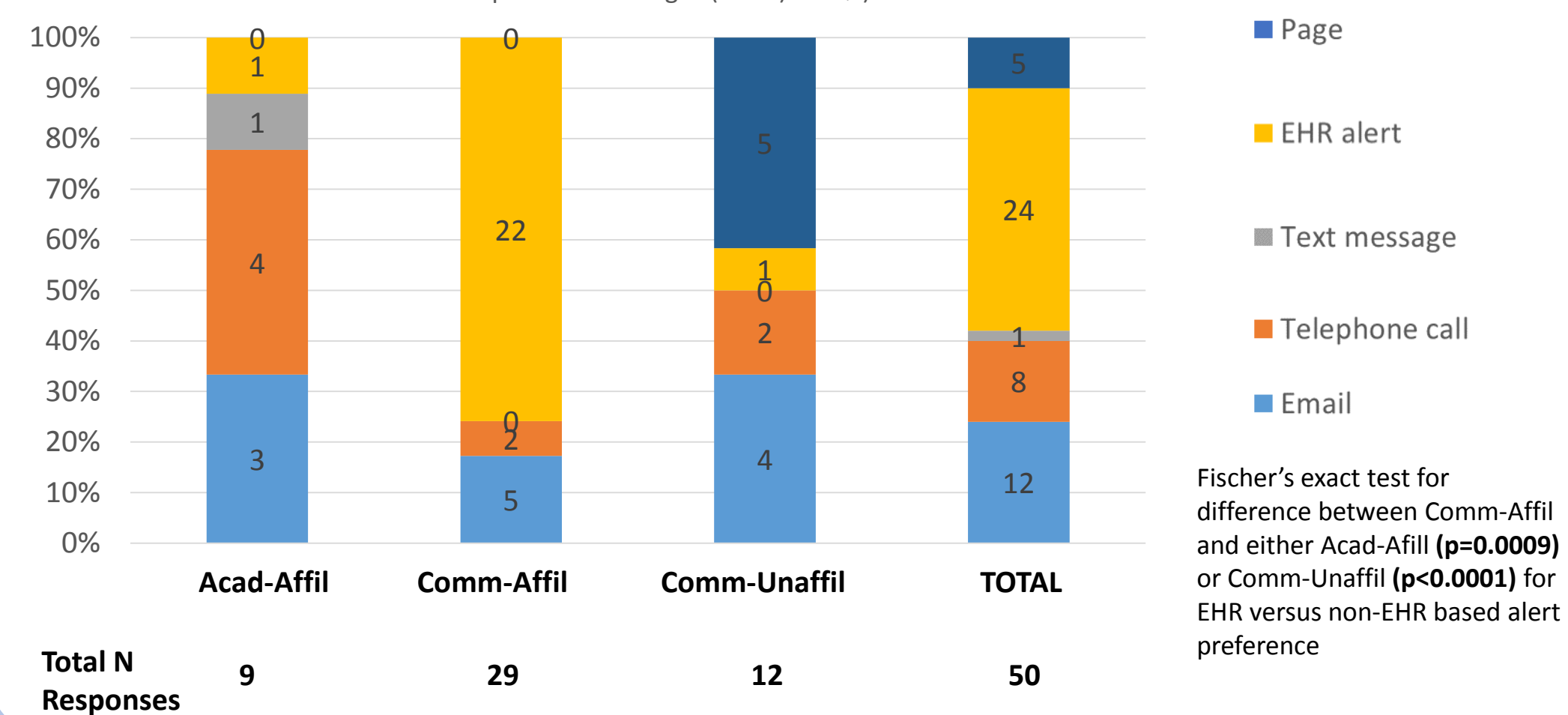
Fischer's exact test not significant for difference between groups whether prefer to be notified or not

Fig 7a: PCP Preferences for notification at admission (offered only to those responding "upon admission only" (N=13) or "upon admission AND prior to discharge" (N=48) on Q3)



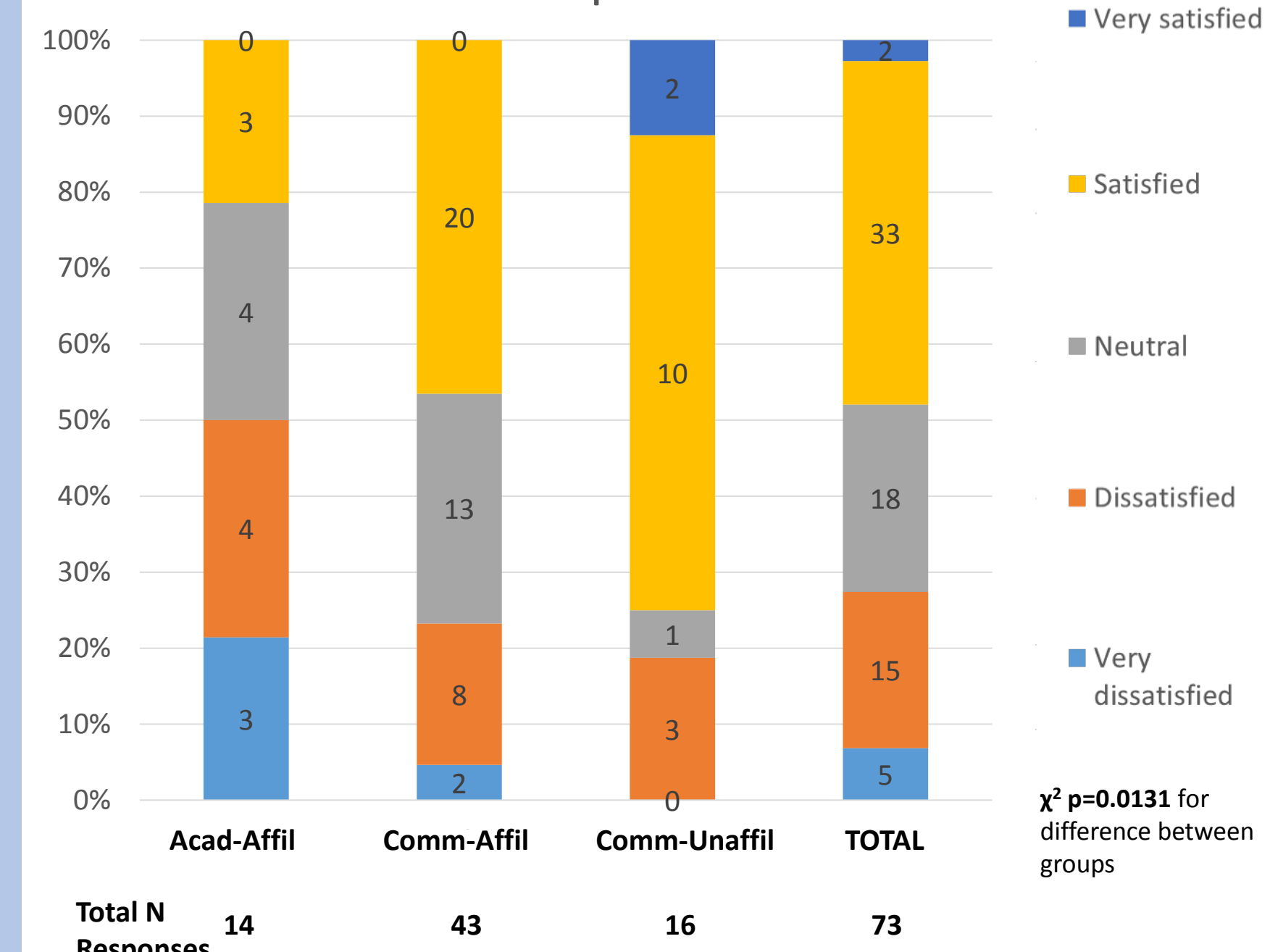
Fischer's exact test for difference between Comm-Affil and either Acad-Affil ($p=0.0019$) or Comm-Unaffil ($p<0.0001$) for EHR versus non-EHR based alert preference

Fig 7b: PCP preferences for notification prior to discharge (offered only to those responding "prior to discharge only" (N=3) or "upon admission AND prior to discharge" (N=48) on Q3)



Fischer's exact test for difference between Comm-Affil and either Acad-Affil ($p=0.0009$) or Comm-Unaffil ($p<0.0001$) for EHR versus non-EHR based alert preference

Fig 8: PCP's overall satisfaction with current communication with inpatient teams



$\chi^2 p=0.0131$ for difference between groups

Conclusions

- Direct communication in 36% of Firm hospitalizations (range 26% - 50% by Firm) and changed in some firms with July house staff transition
- House staff considering "discharge summary adequate" top reason for not attempting direct communication
- 58% of PCP's are notified before discharge "occasionally" or less frequently, and 36% receive discharge summaries "occasionally" or less frequently
- 88% of PCP's want notice upon admission, prior to discharge, or both, and 0 PCP's felt DC summary alone to be sufficient communication
- Modality of preferred communication significantly differed by practice site, >75% community-affiliated providers preferred electronic health record alerts
- Majority (52%) of PCP's dissatisfied with current communication

Implications

- PCP's express an unmet demand for communication prior to their patient's discharge from the hospital
- Communication should ideally be tailored to the preferences and capabilities of the PCP's practice site; higher electronic health record fluency may explain community-affiliated PCP's preferences; other mechanisms are needed for non-affiliated PCP's
- Variation between Firms suggests improvement is feasible (email and phone-based interventions will be investigated in 2016)

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