

Knowledge and use of IIS among a national network of physician primary-care providers

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Background

- Vaccination providers primary users of IIS
- IIS offer multiple functions to support clinical immunization services
- Literature gap: provider use of IIS

“Few studies provided information relevant to an assessment of the utility of IIS for vaccination providers in clinical settings. Descriptions, assessments, and **evaluations** focused on the **utility** of, or **barriers** to, the **use of IIS in day-to-day operations** of vaccination providers in a range of clinical settings would provide important information to help determine the overall value of these interventions and identify tools, interactions, and reporting policies in need of adjustment or modification.” JPHMP 2015;21:227-48

Survey Objective

- Determine knowledge and utilization of IIS among clinical providers
- Topics covered:
 - Knowledge of IIS
 - Use of IIS functions
 - Barriers to IIS use

Methods

- Surveyed physicians in existing sentinel networks (AAP, AAFP, ACP)
- Sentinel networks comparable to AMA*
 - Physician demographics
 - Practice characteristics
 - Responses regarding vaccine-related issues
- Mailed Surveys
 - Pediatricians
 - family medicine physicians (FM)
 - general internal medicine physicians (GIM)

Methods

- Questions developed by UC/CDC, with Advisory Committee input (Peds, FPs and GIMs)
- Pre-tested and piloted
- Administered by Internet and mail
 - Up to 3 mailings
 - Up to 9 e-mail reminders

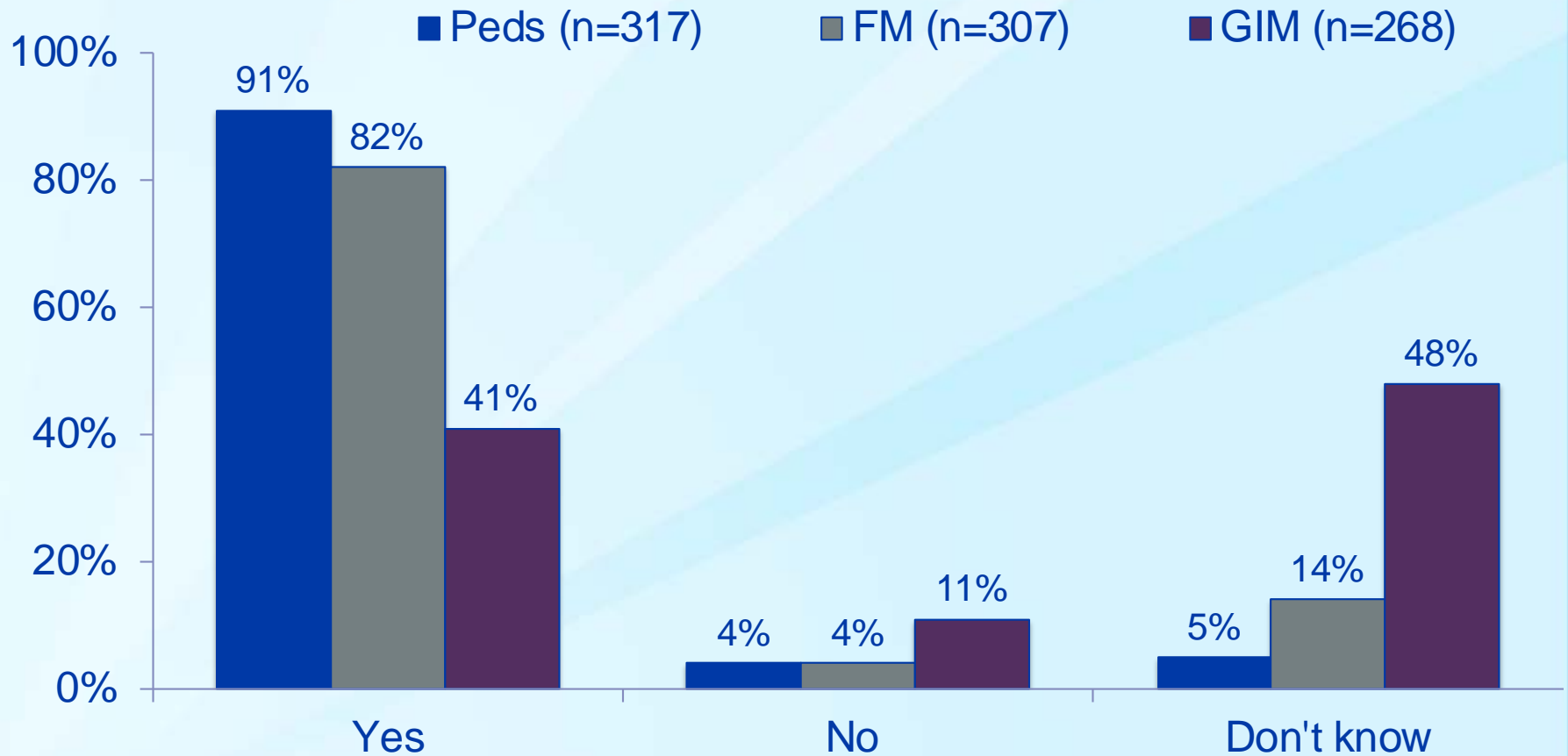
Response Rates

Overall	68% (907/1,325)
Peds	75% (325/435)
FP	68% (310/459)
GIM	63% (272/431)

- Fifteen physicians not giving vaccines were excluded
- Final study populations
 - 317 Peds
 - 307 FPs
 - 268 GIMs

Knowledge of IIS

Does your state, city, or county have a state/local IZ registry?

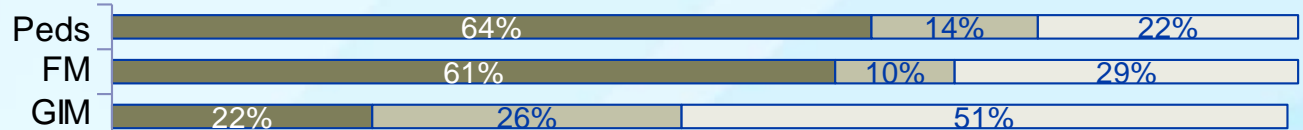


Among all physician respondents

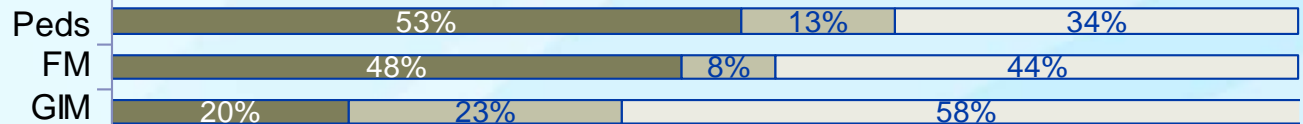
Providers' Knowledge of IIS Functionality

■ Yes ■ No □ Don't know

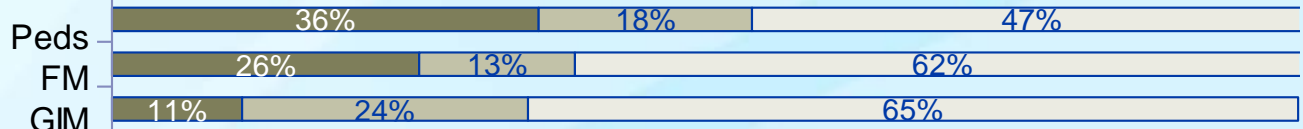
Tell you a patient's
IZ needs at the
time of the visit?



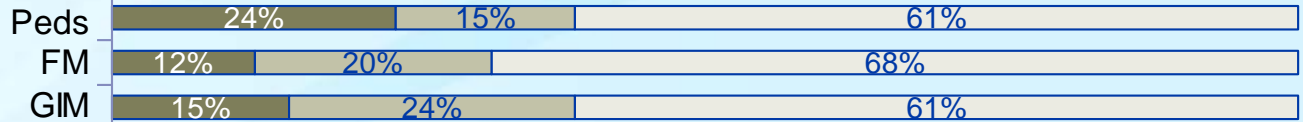
Tell you a patient's
IZ needs for future
visits?



Order publicly
purchased vaccine
or track vaccine
inventory?



Generate overall
vaccine UTD rates
for the practice?



Generate lists of
patients needing
IZs for
reminder/recall
activities?

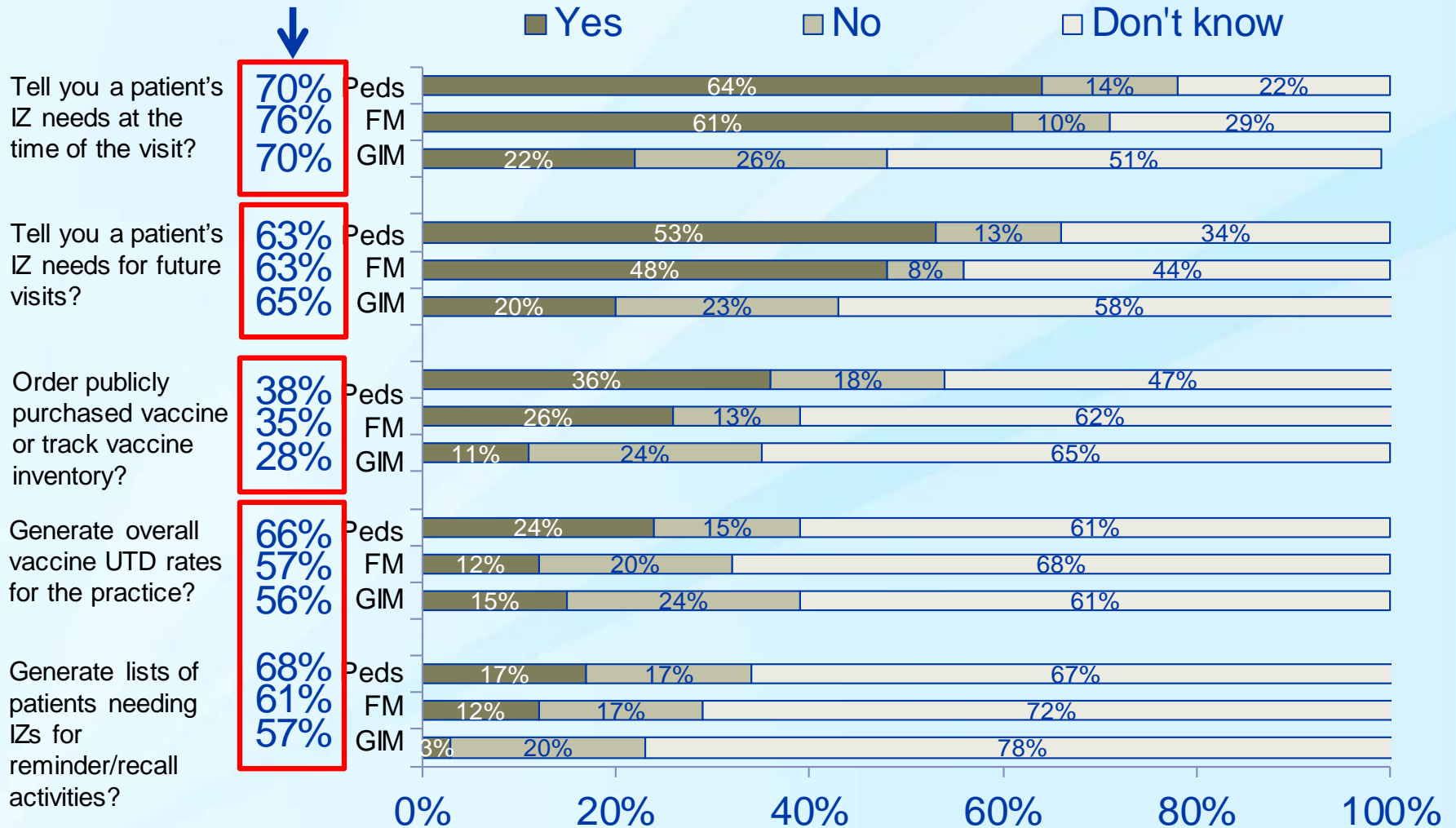


0% 20% 40% 60% 80% 100%

Among physicians that use the IIS: Peds (n=257), FM (n=221), GIM (n=74)

Providers' Knowledge of IIS Functionality

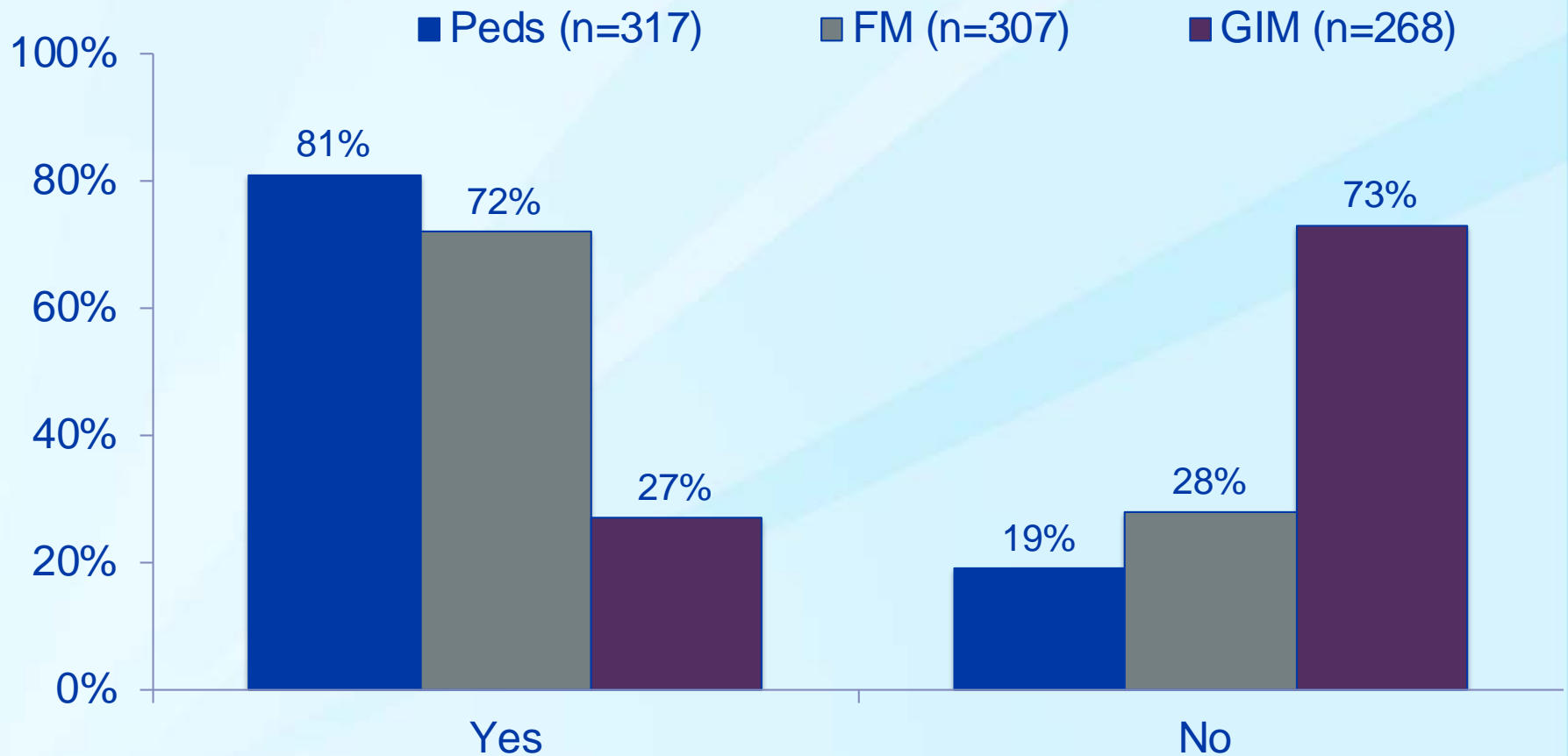
Would use function if available



Among physicians that use the IIS and replied "no" or "don't know" to functionality questions

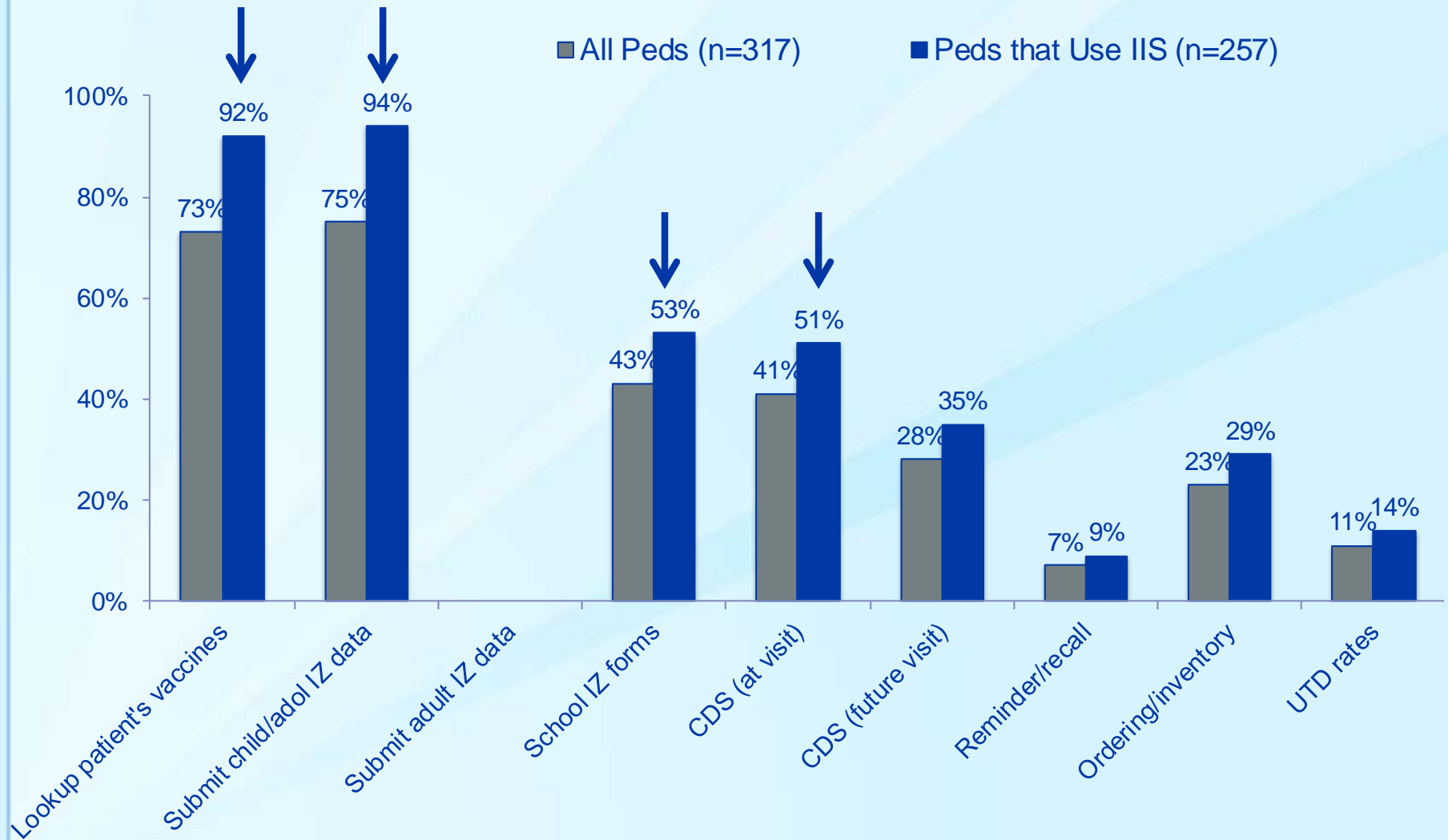
Use of IIS

Does your practice use the registry for any purpose?

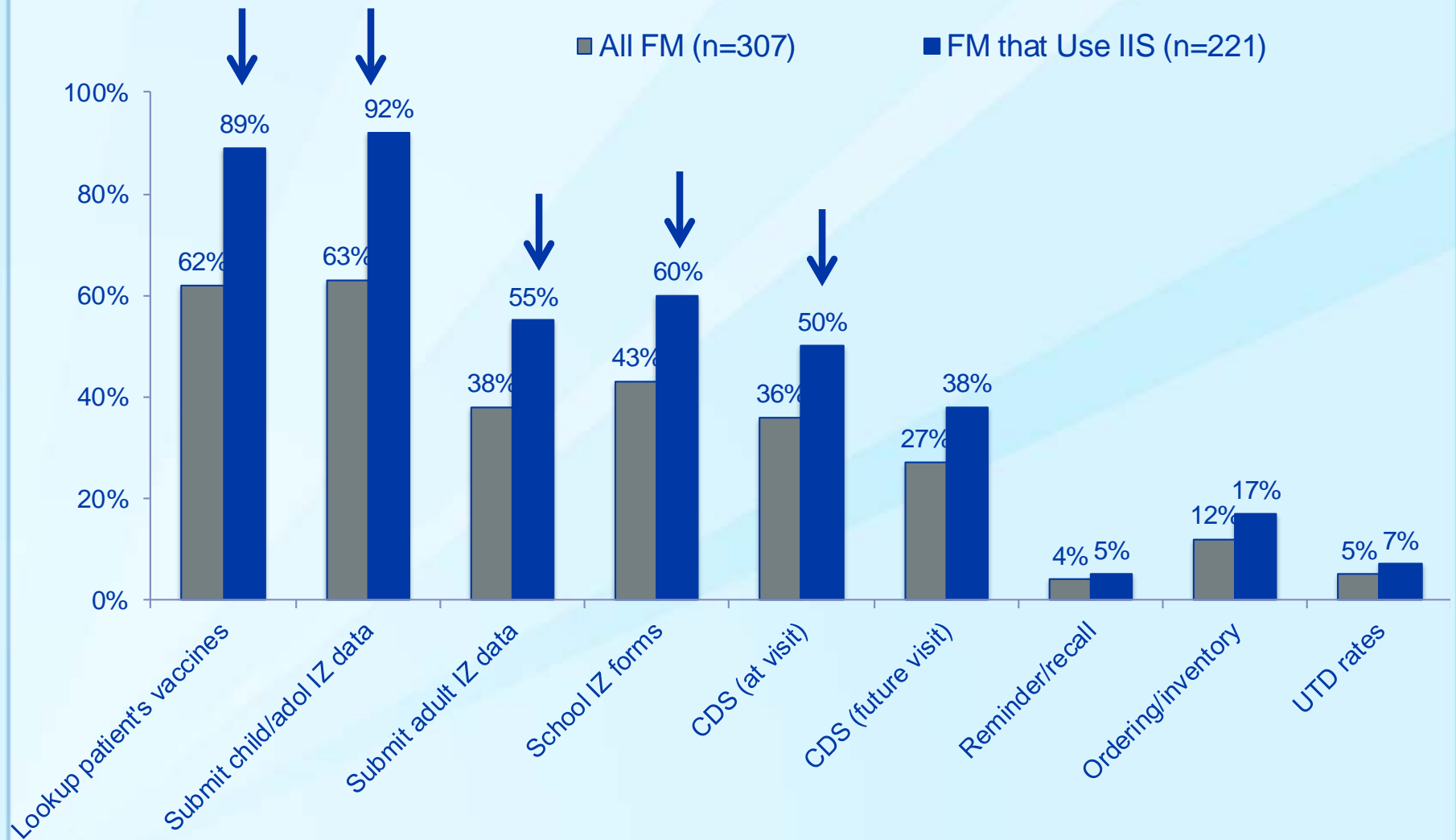


Among all physician respondents

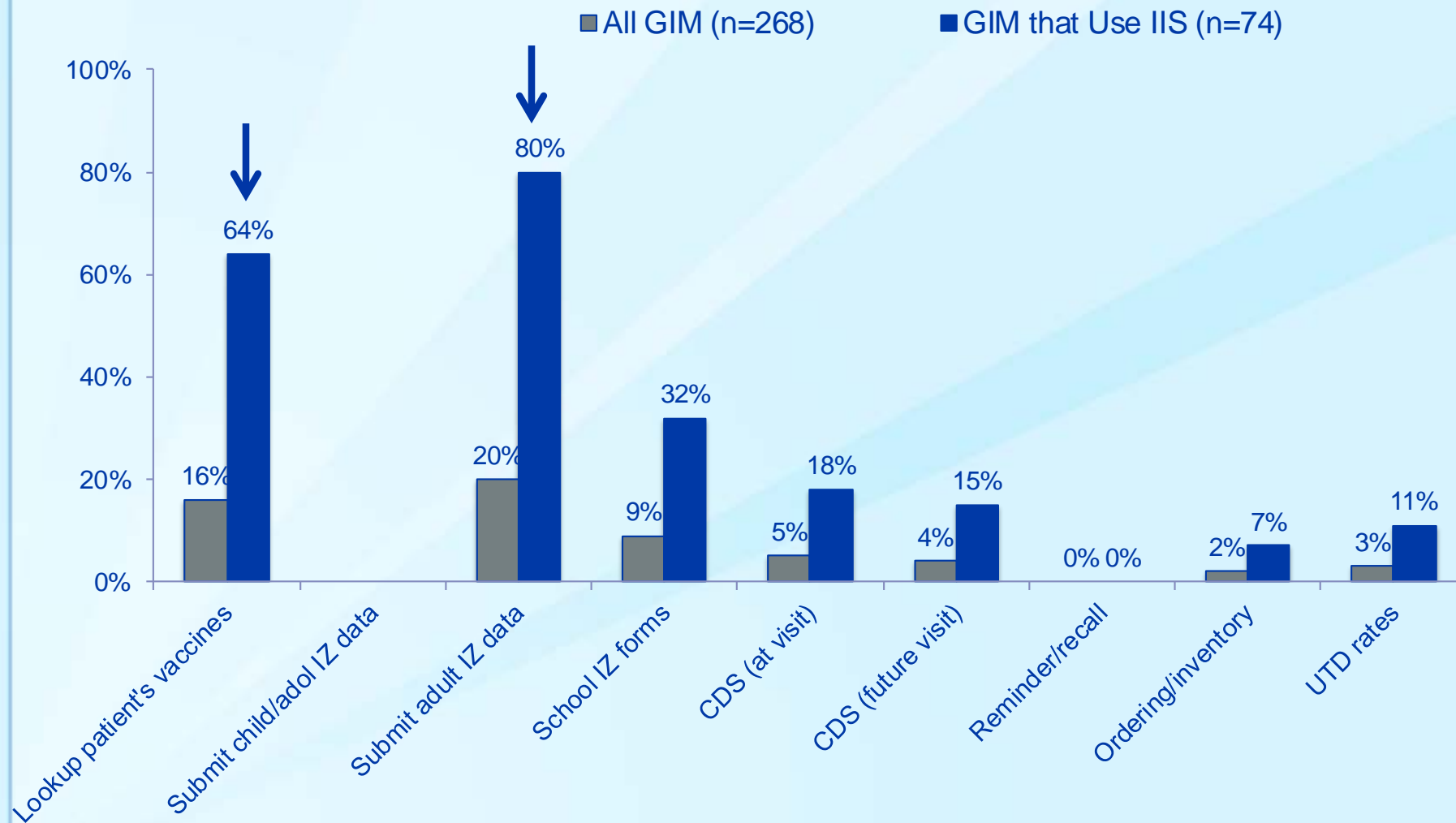
Use of IIS Functions among Pediatricians



Use of IIS Functions among FM Physicians

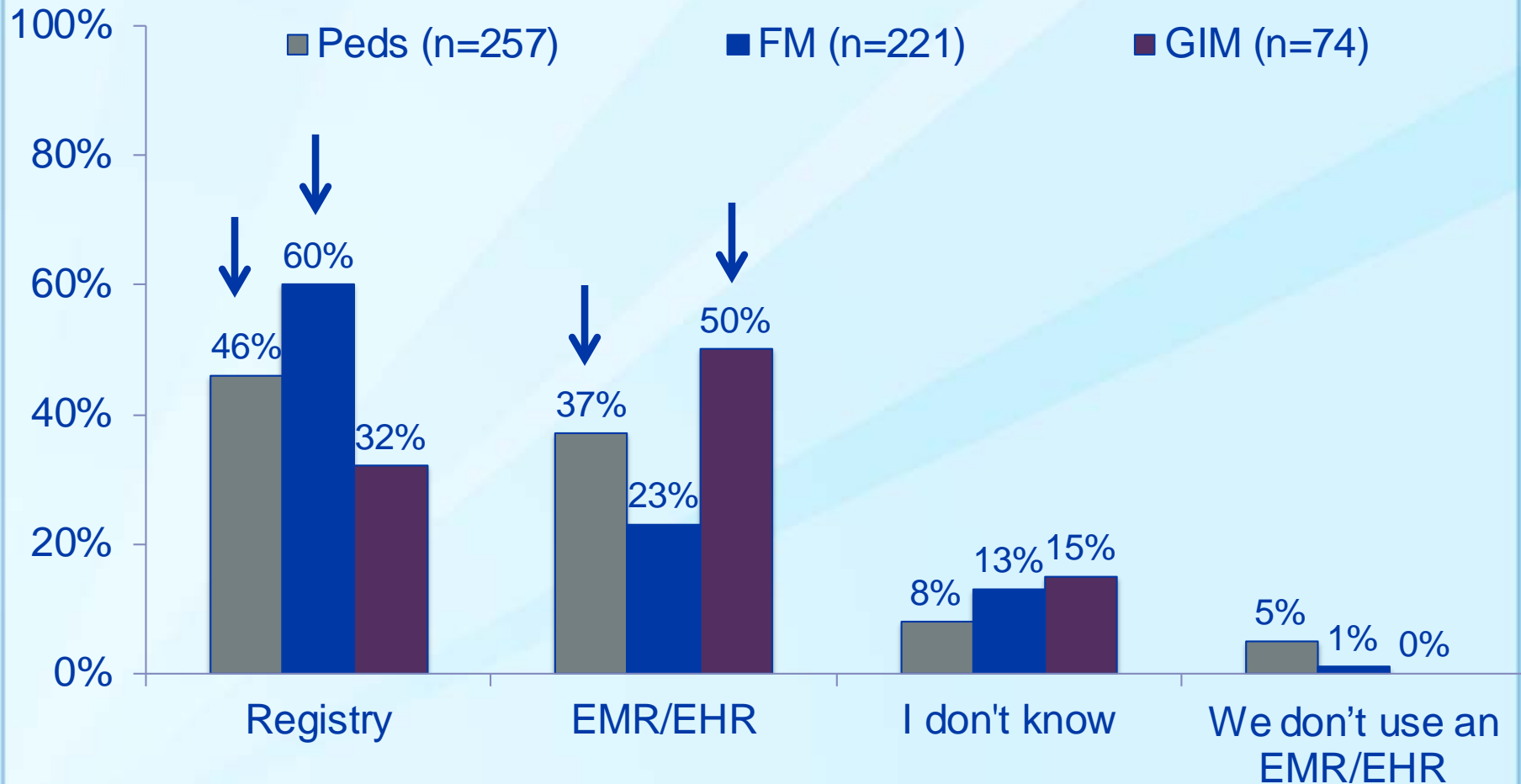


Use of IIS Functions among GIM Physicians



Barriers to use of IIS

Which do you think is more accurate for IZ data, your EMR or the registry?



Among all physicians who use the IIS

Barriers to IIS Use

■ Major barrier ■ Moderate barrier ■ Minor barrier/ Not a barrier ■ Don't know

IZs given
outside of our
state or region
may not be
captured in the
registry

Peds 29% 32% 35% 4%

FM 17% 30% 50% 3%

GIM 20% 30% 44% 6%

The time it takes
for staff to enter
information into
the registry

Peds 23% 19% 49% 9%

FM 25% 26% 43% 6%

GIM 34% 28% 32% 6%

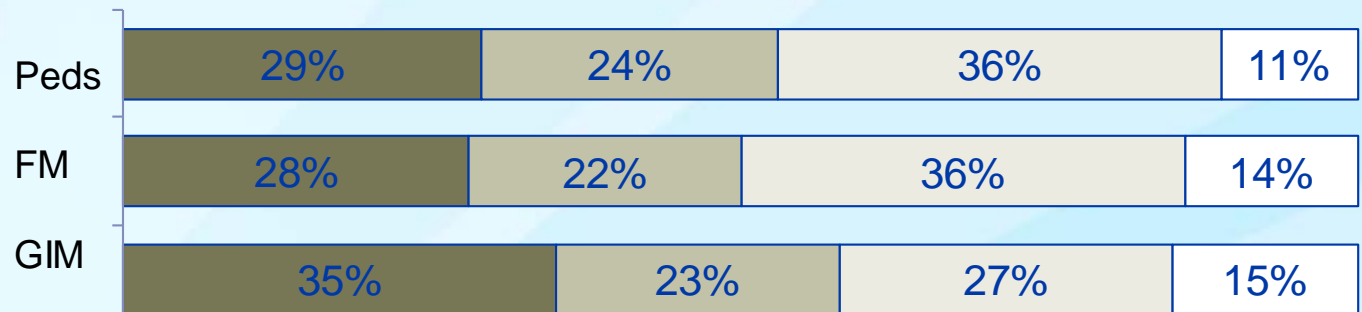
0% 20% 40% 60% 80% 100%

Among all physician respondents: Peds (n=317), FM (n=307), GIM (n=268)

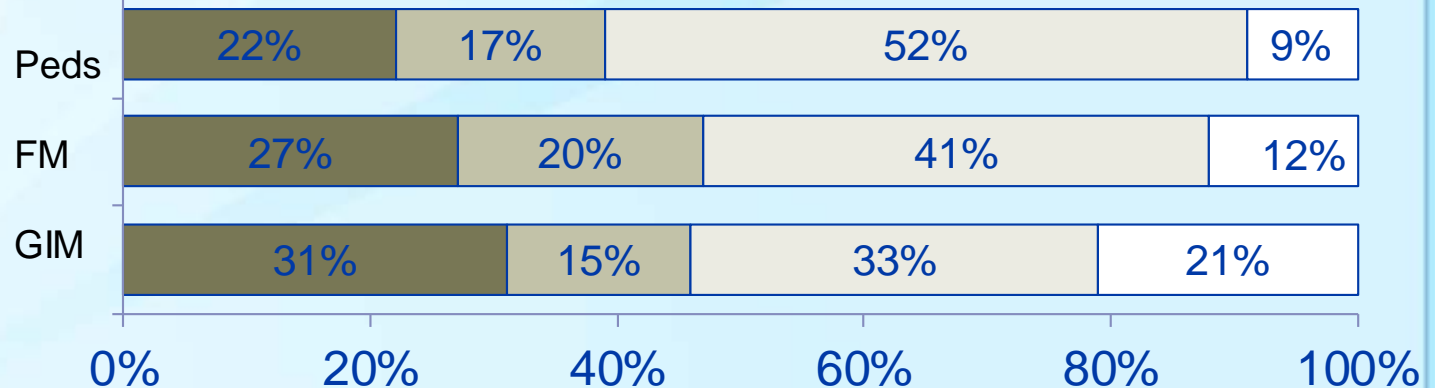
Barriers to IIS Use

■ Major barrier ■ Moderate barrier ■ Minor barrier/ Not a barrier ■ Don't know

The registry will not update IZ information in our practice's EMR/EHR

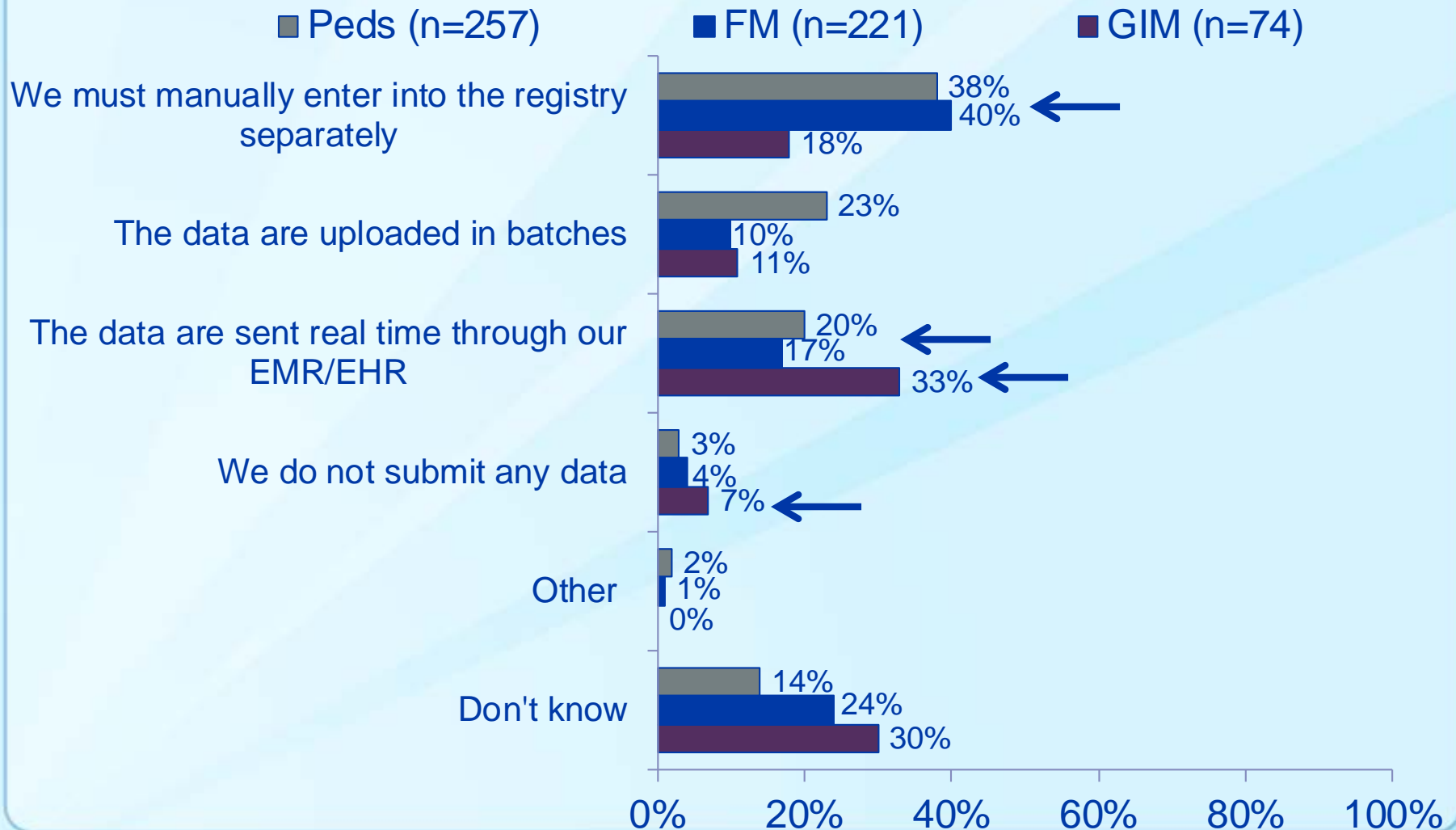


Our practice has to enter IZ data manually into the registry because we don't have the ability to upload electronically



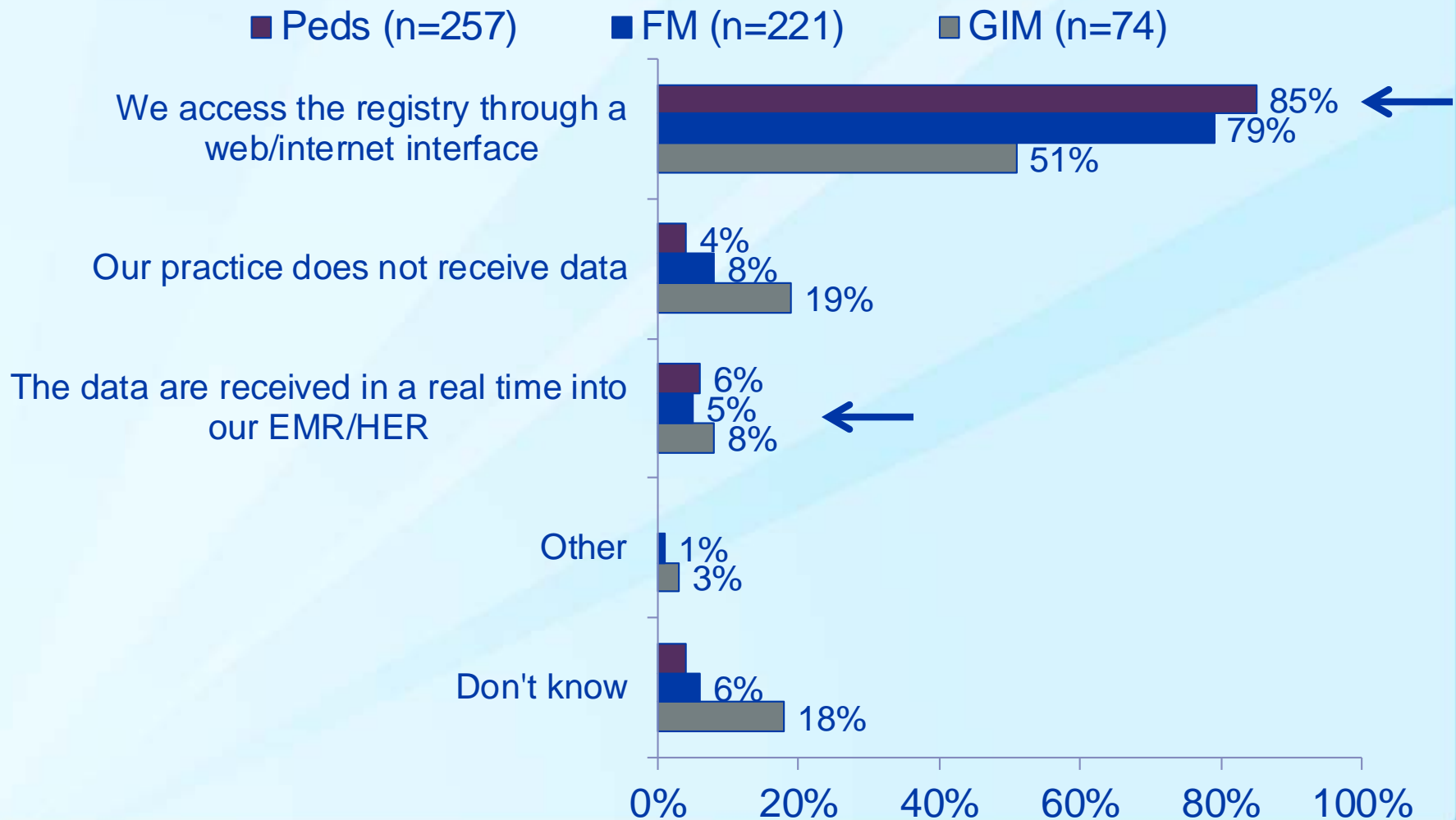
Among all physician respondents: Peds (n=317), FM (n=307), GIM (n=268)

How are immunization data from your practice transmitted to the registry?



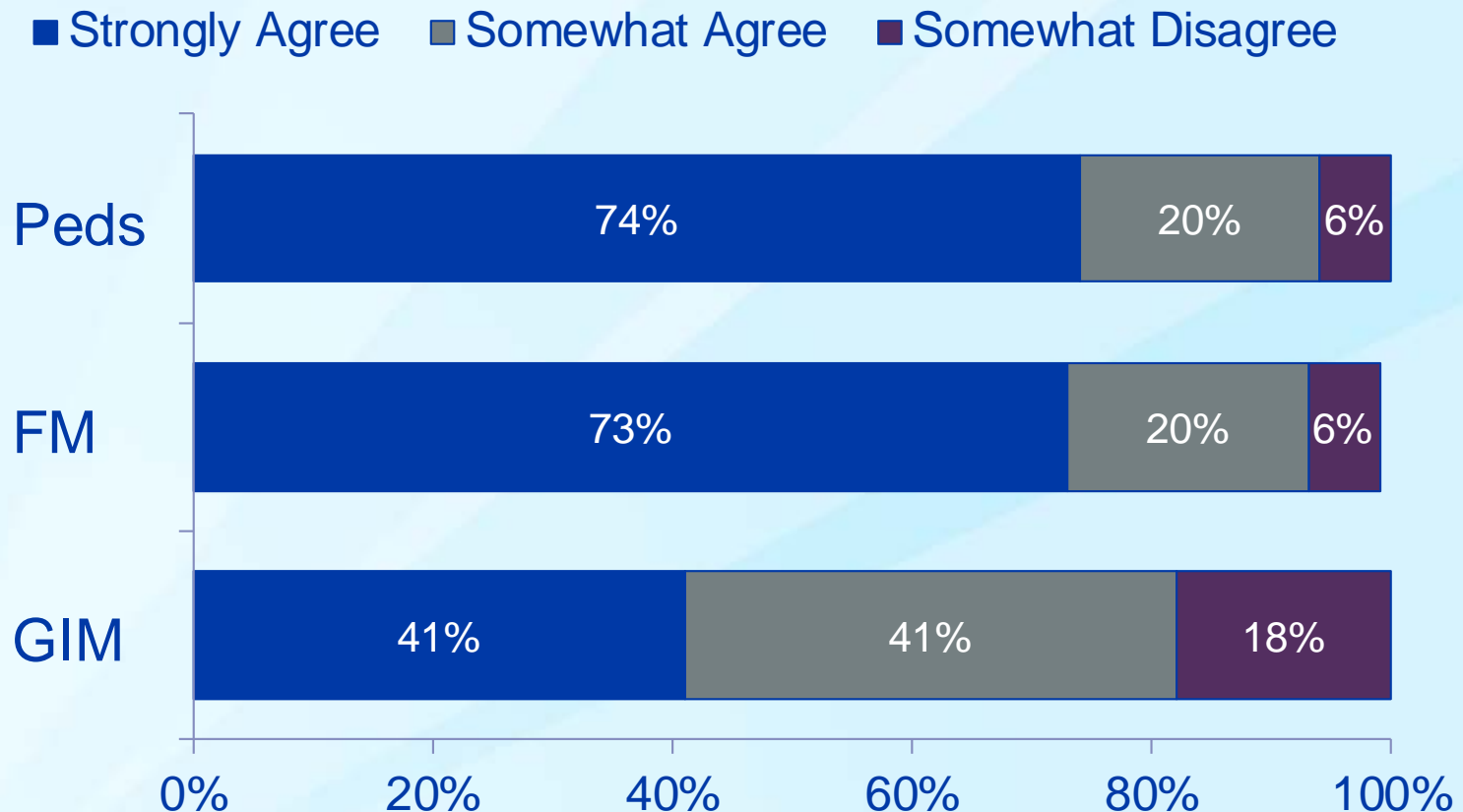
Among all physicians who use the IIS

How does your practice receive data from the registry?



Among all physicians who use the IIS

Assuming technical problems could be solved, I think using the registry would be valuable for our practice



Among all physician respondents: Peds (n=303), FM (n=299), GIM (n=258)

Summary

- Knowledge and use of IIS is high among Peds and FM; low among GIM
- Knowledge of specific IIS functions is low among all physician types
- Primary use is data submission
- Common barriers to IIS use include data accuracy and interoperability issues
- Value of IIS high for Peds and FM; lower among GIM

Limitations

- Results might not be generalizable to all physicians
- Non-respondents might have different views than respondents
- Data are self-reported
- Physicians might have limited knowledge if they are less involved in IZ delivery and management

Next Steps

- Finalize analyses and publish results
- Conduct additional surveys/focus groups to better understand barriers among physicians and non-physician users of IIS
- Design and implement interventions for removing barriers
 - High priority: Interventions to address technical and non-technical interoperability barriers

Thank You!

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