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Background

Education → important social determinant of health

- *Early childhood education* → ↑ years of education, ↑ bachelor's degrees, improved physical health¹

Healthy People 2030 & Sustainable Development Goals

- Increase access to and participation in high-quality early childhood education/pre-primary programs^{2,3}
- Increase the proportion of children with developmental delays who get interventions services by age 4 years²

COVID-19 pandemic → ↑ disparities in access to care and early childhood education⁴

- **26.4%** of US households → missed/delayed pediatric preventive health services due to COVID-19 pandemic⁵
- Developmental surveillance and screening important components of wellness visits
- ↓ verbal, motor, and overall cognitive performance → lower SES most impacted⁶

Baltimore City ~ 3,200 children served in 60 centers⁷

- **42%** up to date on preventive and primary health services (2020-2021)⁸
- **68%** up to date on immunizations (2020-2021)⁸

Project Goals

Expand access to preventive healthcare for children and families enrolled in EHS and HS programs and increase pediatric clinical opportunities Pediatric Nurse Practitioner (PNP) and Family Nurse Practitioner (FNP) students.

Implementation

Identify EHS & HS programs to form partnership:

Previously established relationships
Referrals from other EHS/HS programs
Outreach to EHS/HS programs

Coordination of on-site exam days

Faculty identify available days
Centers sign up for days using SignUpGenius
Students sign up for days using SignUpGenius

Exams scheduled by center staff

Permission slips signed for children not seen with parents
Exam day/time scheduled with parent/guardian

DNP faculty and students perform exams on site

Centers provide health records: history form, immunization records, lead and hemoglobin records, TB screening
Fill out Child Health Assessment form
Make referrals if needed

Results

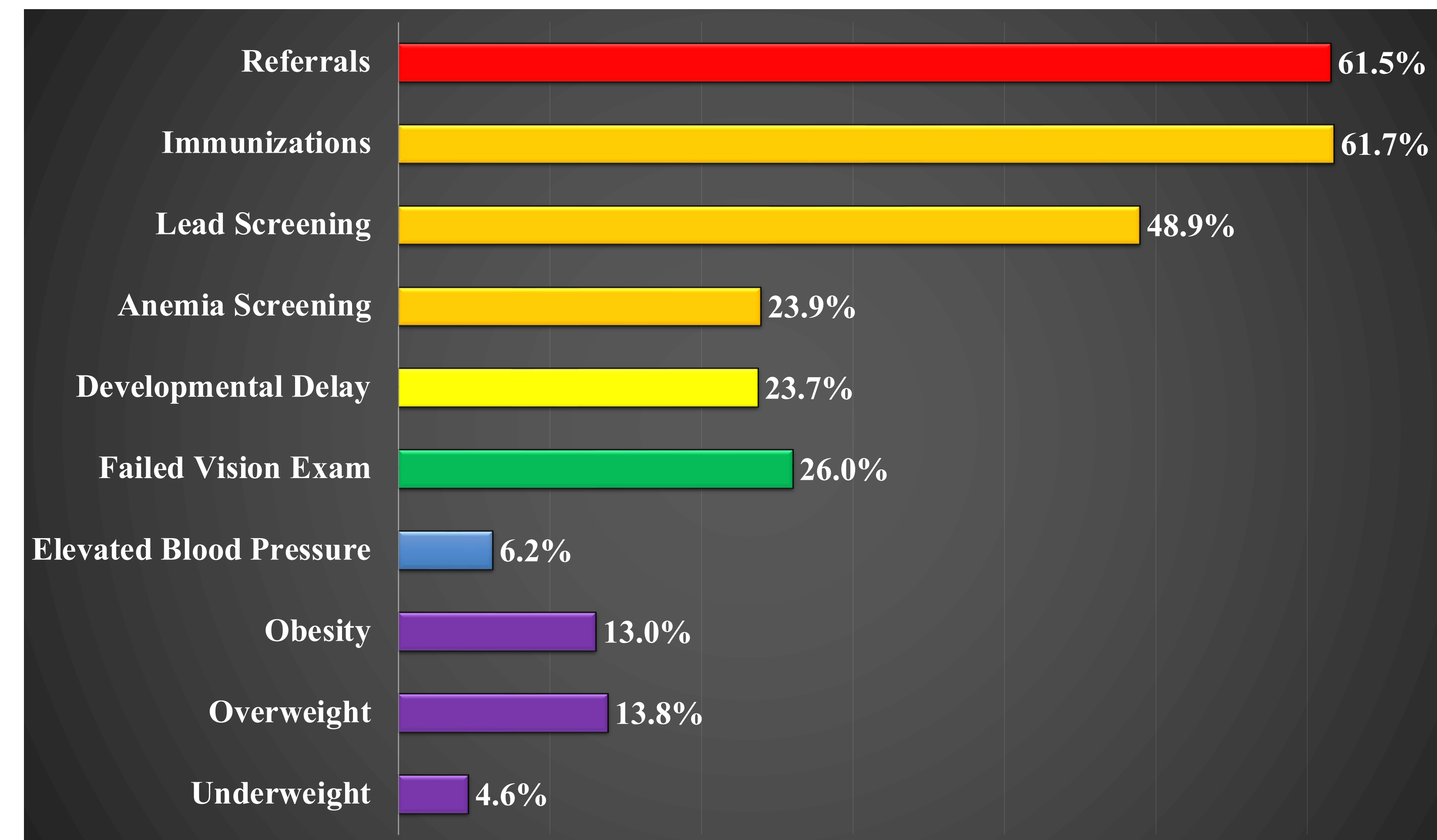


Figure 1: Healthcare needs identified by Family NP and Pediatric NP DNP students and faculty during 712 patient encounters at 41 EHS & HS centers from 2020-2023.

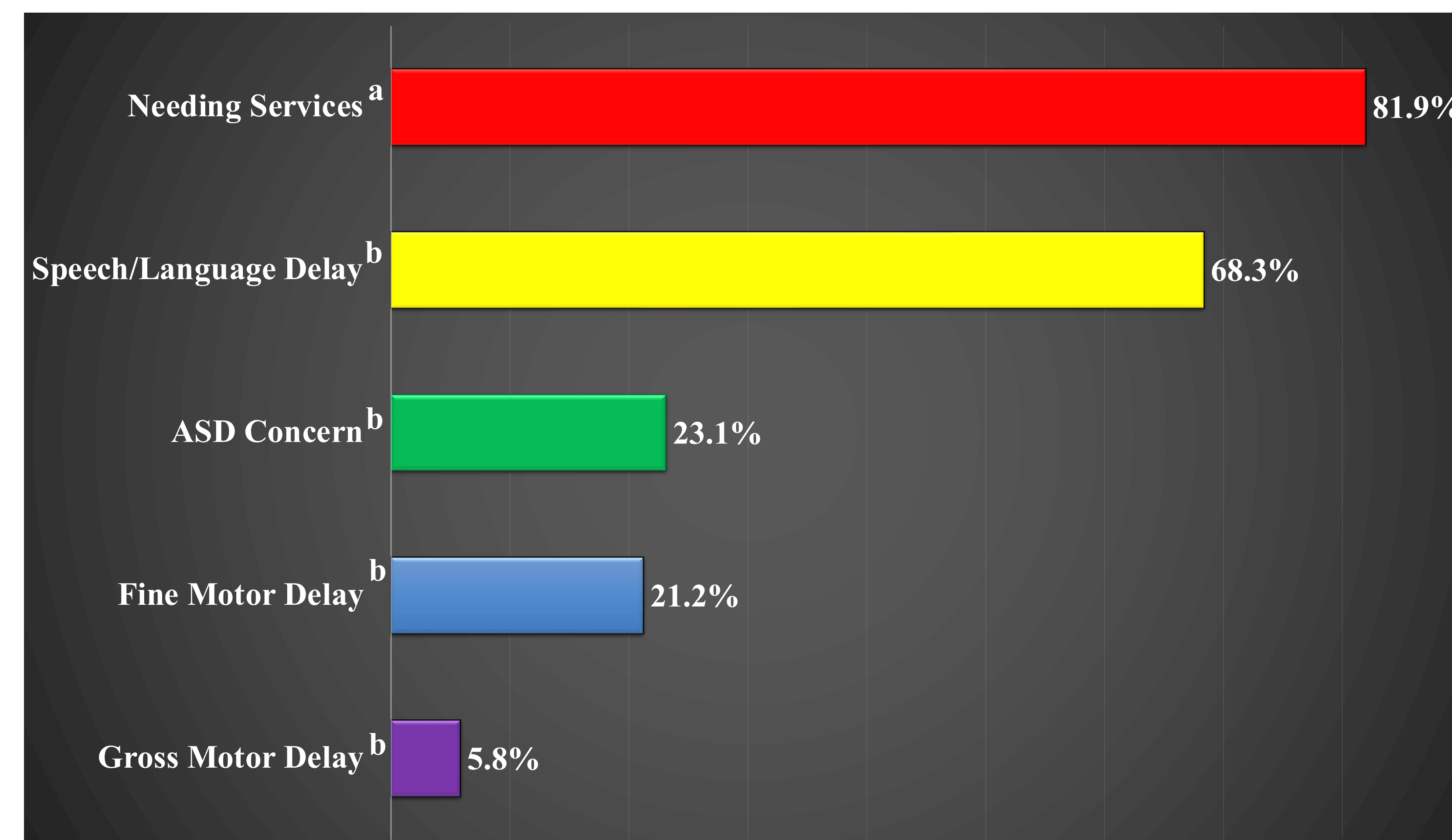


Figure 2: Children with Developmental Delays Needing Services. Note. ^a Calculated from total children with developmental delays (n=127). ^b Calculated from total children needing services (n=104).

Discussion/Conclusions

EHS/HS programs and the children and families they serve benefit from these partnerships.

- *Improved access to healthcare* → EHS/HS medical enrollment needs met
- *Identified developmental delays* → potential for improved healthcare outcomes

Partnerships with EHS and HS programs provide an excellent learning opportunity for FNP and PNP students.

- Increased pediatric primary care clinical hours
- Opportunities to learn about social determinants of health

Future Implications

- **Follow-up on referrals**
 - RN-BSN students & faculty
- **Continue to expand partnership & services**
 - EHS/HS programs in additional counties in Maryland
 - Parents/guardians at Family Support Centers
 - Contraceptive counseling with Teen Parenting Program
- **Model implemented by other programs**
 - Address preceptor/clinical site shortage
 - Expand access to preventive care services for EHS/HS children
 - Community-based clinical experiences to learn about social determinants of health

References



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