



Community Needs Assessment: Exploring access to pediatric audiology services in Oregon

Monica Zmudzinski, B.A.^{1,2}, Matthew O'Connell, M.S.W.¹, Kristin Knight, M.S., CCC-A¹
 Oregon Health & Science University¹, University of Arizona²

Background

- Infants who do not pass NBHS should have an audiologic evaluation by 3 months.
- Oregon diagnostic pediatric audiology centers are in metropolitan areas on the west side of the state.
- Infants in central and eastern Oregon are twice as likely to miss the diagnostic benchmark compared to statewide data.

| | Central | Eastern | All Oregon |
|--------------------------------|-----------|-----------|------------|
| Infants referred NBHS | 185 (2%) | 286 (3%) | 4550 (4%) |
| Diagnostic testing by 3 months | 128 (69%) | 183 (64%) | 3811 (84%) |
| No diagnosis | 57 (31%) | 103 (36%) | 739 (16%) |
| Lost to follow-up | 36 (20%) | 62 (22%) | 482 (11%) |

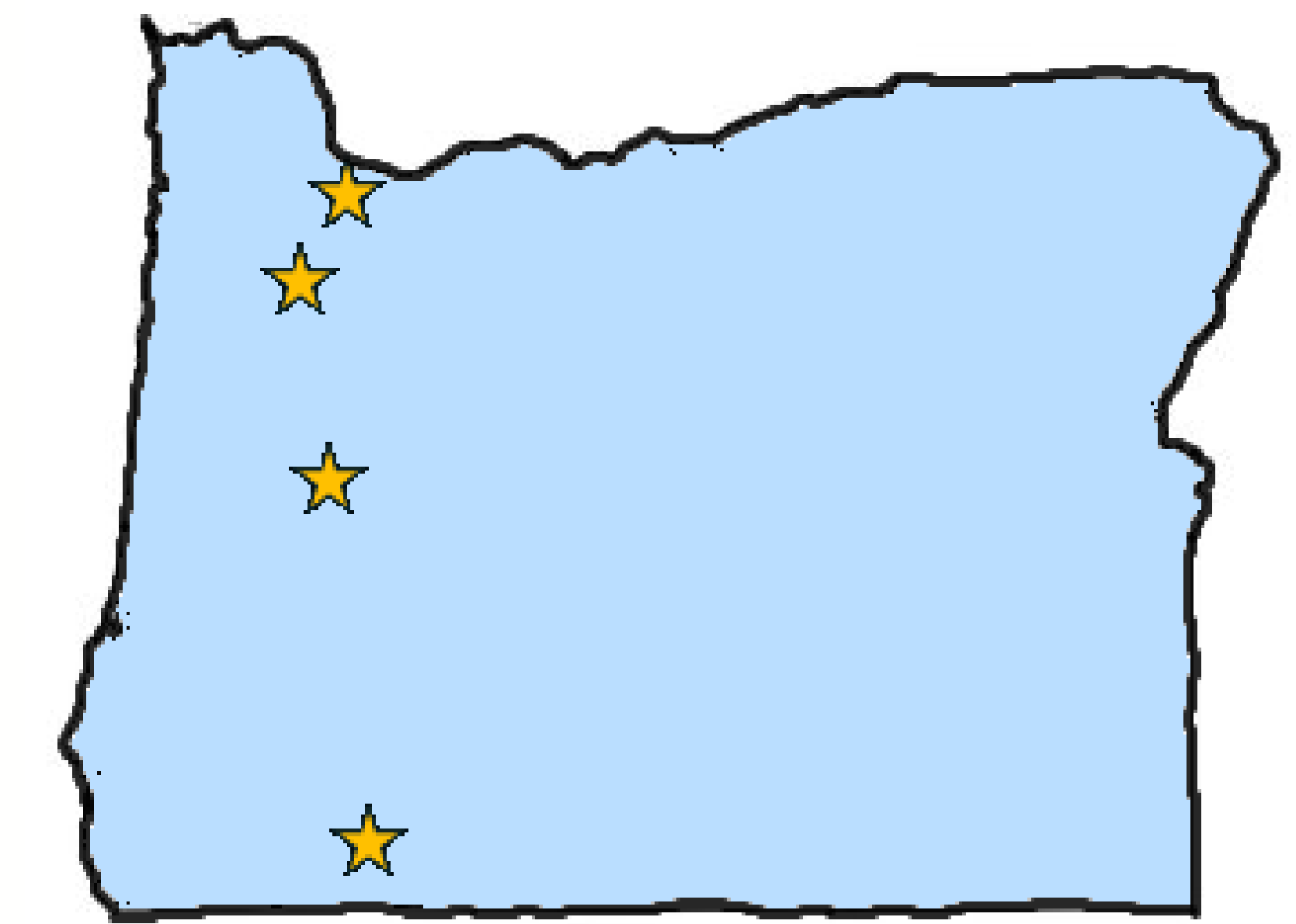
Annual summary data, Oregon EHDI

Methods:

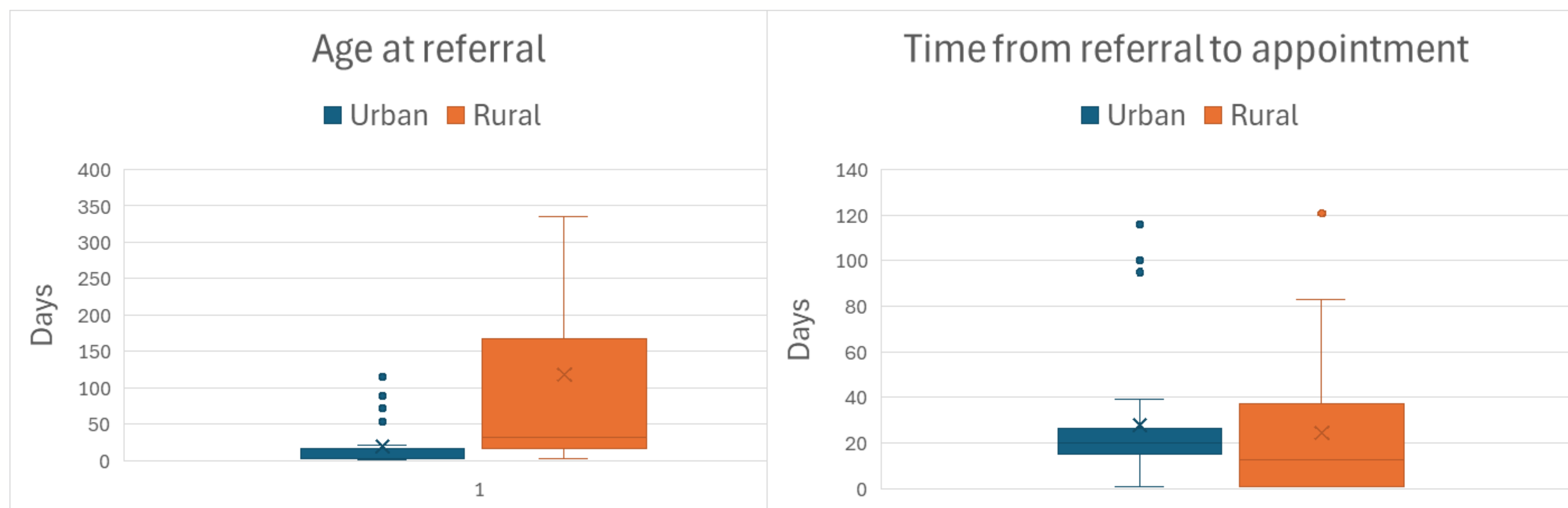
- Retrospective review of children with an initial audiologic evaluation 1/2023-10/2024.
- All 141 rural children included, 141 randomly selected urban children used for comparison.
- A subset 51 infants had referred NBHS.
- Demographic, referral, and appointment information obtained from electronic medical records
- Survey of 6 rural audiologists who provide services to children

Aims:

1. Compare referral and appointment timelines for children from urban and rural counties at a single diagnostic center.
2. Survey rural audiologists about pediatric audiology services available and barriers to care.



Areas offering auditory brainstem response testing



Results:

- Rural infants were referred for diagnostic evaluations later than urban infants
- Rural audiologists reported lack of provider availability, insurance type, and distance are barriers to serving infants and children in their community.

Future Directions

- Identify barriers to timely referral for diagnostic testing.
- Investigate novel service delivery models and family perspectives.

Participant characteristics

| | Rural infants (n=22) | Urban infants (n=29) | Total (n=51) |
|---|----------------------|----------------------|--------------|
| Sex | | | |
| Female, n | 13 (59%) | 15 (52%) | 28 (55%) |
| Male, n | 9 (41%) | 14 (48%) | 23 (45%) |
| Hispanic ethnicity, n | 16 (73%) | 7 (24%) | 23 (45%) |
| Insurance type | | | |
| Private, n | 7 (32%) | 17 (59%) | 24 (53%) |
| Public, n | 15 (68%) | 12 (41%) | 27 (53%) |
| Distance traveled, mean (range) | 147 miles (63-400) | 13 miles (3-30) | |
| Age at referral, median (range) | 33 days (2-913) | 2 days (1-115) | 15 days |
| Time from referral to appointment, median (range) | 13 days (1-121) | 20 days (1-116) | 19 days |
| Age at appointment, median (range) | 8 weeks (4-148) | 4 weeks (2-16) | 6 weeks |

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