### Improving Access to Services and Family Engagement in The Massachusetts Early Intervention Program

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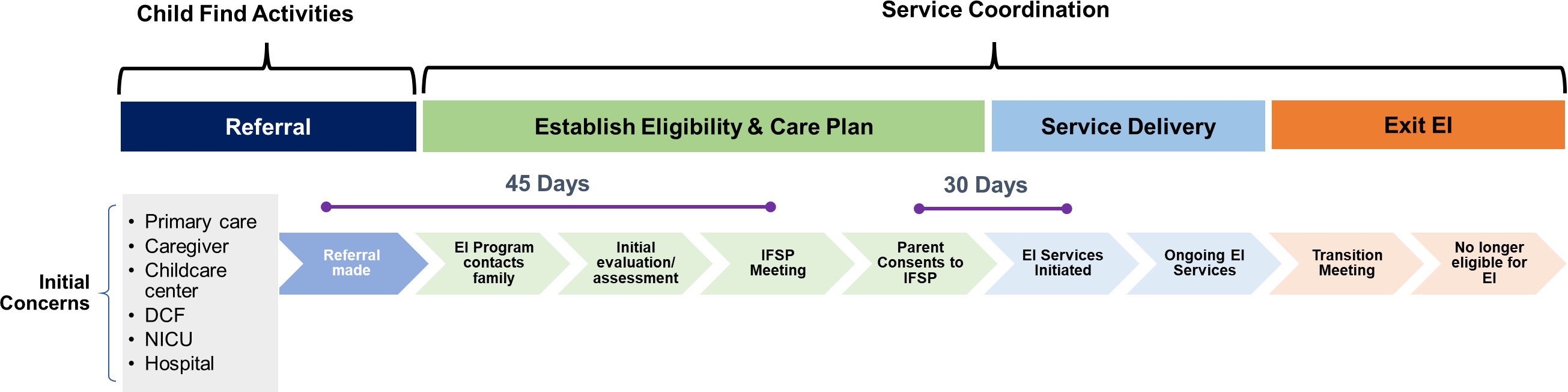
ICC Subcommittee Meeting February 5, 2025

These findings are part of DrPH dissertation research conducted from **March-December 2023**

## Agenda

* Background & Introduction
* Study Aims
* Quantitative Study
* Qualitative Study
* Recommendations
* Q&A Discussion

### Early Intervention Care Cascade



Eligibility Reason:

* + Established condition(s)
  + Established delay
  + At risk for developmental delay
  + Clinical judgment

### Purpose & Research Aims

###### Purpose:

To use applied public health research to identify inequities along the MA EI care cascade and to explore strategies to promote equitable care within the post-pandemic landscape

*Specific attention was given to the CHW model as one strategy while also exploring additional best practices*

###### Research Aims:

1. **Quantitative**: Map the care cascade
2. **Qualitative**: Identify strategies to improve equity and family engagement
3. **Recommendations**: Synthesis of findings

***Protection for Human Subjects***

#### Study procedures were approved by the BU/BUMC IRB and the quantitative procedures were additionally approved by the DPH IRB to obtain the dataset

**Research Question 1**

Quantitative Study

# Aim 1

Quantify **how many** children with an initial referral to Part C **receive an eligibility evaluation**

# Aim 2

Explore if there are **differences in attrition** before, during, and after the COVID-19

pandemic

# Aim 3

Identify **who is at the greatest risk** of attrition

Methods

**Retrospective cohort study using data from the DPH EI data system**

3 Cohorts following initial referral:

**Pre-Pandemic**

9/18 - 9/19

**Pandemic**

3/20 - 6/21

**Post-Pandemic**

10/21- 3/22

1 year before the pandemic plus a 6-month buffer

EI services were delivered online through June

Public health emergency was lifted in October

**Race, Ethnicity, Language Variables**

|  |  |  |
| --- | --- | --- |
| **Variable** | **Categories** | **New Variable** |
| **Race/ethnicity** | White, Black, **Hispanic/Latino,** Asian/Pacific Islander, American Indian/Alaska Native, two or more races | **Combined race/ethnicity**   * Any race Hispanic * Black not Hispanic * White not Hispanic * Multiracial not Hispanic * Asian not Hispanic * NHPI/AIAN not Hispanic * Unknown/missing race/ethnicity |
| **Ethnicity** | **Hispanic**, not Hispanic |
| **Preferred**  **spoken language** | English, Spanish, Haitian Creole, Portuguese, Arabic, Chinese, Crioula, other, unknown/missing | **REL** (race/ethnicity/preferred spoken  language) examples:   * Any Race, Hispanic, Spanish * White, not Hispanic, English * Black, not Hispanic, English |

**Study Population:**

**REL**

*Between each cohort, decrease in % of White not Hispanic children with a preferred spoken language of English (41.7 % vs 38.7 vs 36.2%) with a concurrent increase in Hispanic children, and preferred spoken languages other than English*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RACE** | **ETHNICITY** | **LANGUAGE** | **%** | **N** |
| **White** | **Not Hispanic** | **English** | **39.6** | **36,609** |
| **Any race** | **Hispanic** | **English** | **16.1** | **14,856** |
| **Any Race** | **Hispanic** | **Spanish** | **9.5** | **8,806** |
| **Black** | **Not Hispanic** | **English** | **7.4** | **6,876** |
| Unknown | Missing | English | 5.9 | 5,476 |
| Unknown | Missing | Missing | 5.5 | 5,039 |
| Multiracial | Not Hispanic | English | 3.9 | 3,576 |
| Asian | Not Hispanic | English | 2.6 | 2,426 |
| Asian | Not Hispanic | Other | 1.6 | 1,508 |
| White | Not Hispanic | Portuguese | 1.5 | 1,378 |
| Black | Not Hispanic | Other | 1 | 905 |
| White | Not Hispanic | Other | 0.9 | 862 |
| Unknown | Missing | Spanish | 0.9 | 787 |
| Black | Not Hispanic | Haitian Creole | 0.8 | 721 |
| Hispanic | Any Race | Other | 0.6 | 583 |
| White | Not Hispanic | Arabic | 0.6 | 527 |
| Asian | Not Hispanic | Chinese | 0.6 | 545 |
| Unknown | Missing | Other | 0.6 | 508 |
| NHPI/AIAN | not Hispanic | English | 0.3 | 248 |
| Multiracial | Not Hispanic | Other | 0.2 | 175 |
| NHPI/AIAN | not Hispanic | Other | 0.1 | 67 |

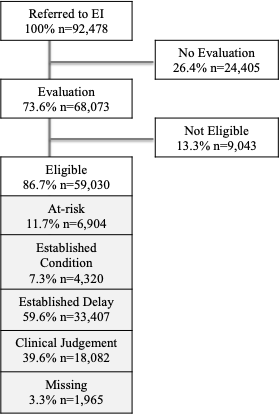
**N= 92,478**

**Aim 1:**

#### Quantify how many children with an initial referral to Part C receive an eligibility evaluation

**All Time Periods**

*Consistent with administrative records, literature, & qualitative interviews*



**Aim 2:** Explore if there are differences in attrition before, during, and after the pandemic

Period: Pre-COVID

12 months (Sep 2018-19)



Period: COVID

15 months (Mar 2020-Jun 21)



Period: Post-COVID

6 months (Oct 2021-Mar 22)



**\***= Statistical significance

|  |  |  |  |
| --- | --- | --- | --- |
| Referred to EI  100% n=39,069 | |  | |
|  |  | | No Evaluation  25.0% n=9,761 |
|  | |
| Evaluation  **75.0% n=29,308** | |  | |
|  |  | | Not Eligible  17.1% n=5,014 |
|  | |
| Eligible  **82.9% n=24,294** | |  | |
| At-risk 11.1% n=2,690 | |
| Established Condition 7.4% n=1,790 | |
| Established Delay 90.8% n=22,047 | |
| Clinical Judgement 5% n=1,204 | |
| Missing  0.2% n=47 | |

|  |  |  |  |
| --- | --- | --- | --- |
| Referred to EI  100% n=38,332 | |  | |
|  |  | | No Evaluation 26.9% n=10,324 |
|  | |
| Evaluation **\***  **73.1% n=28,008** | |  | |
|  |  | | Not Eligible  9.0% n=2,517 |
|  | |
| Eligible **\***  **91.0% n=25,491** | |  | |
| At-risk 12.5% n=3,173 | |
| Established Condition 7.5% n=1,900 | |
| Established Delay  13.7% n=3,489 | |
| Clinical Judgement  62.8% n=15,999 | |
| Missing 7.3% n=1,857 | |

|  |  |  |  |
| --- | --- | --- | --- |
| Referred to EI  100% n=15,077 | |  | |
|  |  | | No Evaluation 28.7% n=4,320 |
|  | |
| Evaluation **\***  **71.4% n=10,757** | |  | |
|  |  | | Not Eligible  14.1% n=1,512 |
|  | |
| Eligible **\***  **85.9% n=9,245** | |  | |
| At-risk 11.3% n=1,041 | |
| Established Condition 6.8% n=630 | |
| Established Delay  85.1% n=7,871 | |
| Clinical Judgement  9.5% n=879 | |
| Missing 0.7% n=61 | |

### Attrition from Referral to Evaluation: Age

Compared to the mean, children <12 months at initial referral are **less** likely to receive an evaluation while those 12 months+ are **more** likely

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Descriptive %** | **OR** | **95% CI** | | **P-value** (based on contrasts) | |
| **Total Sample Size** | 92,478 |
| **Percent** | 73.6 |
| **Age (at first referral)** | | | | | | |
| 12 - <24 months old | **78.6** | ref | ref | ref | | <0.001 |
| >=24 months old | **74.3** | 0.944\* | 0.884 | 1.008 | | <0.001 |
| <12 months old | **71.3** | **0.900** | 0.850 | 0.952 | | <0.001 |
| Missing | **67.7** | **0.507** | 0.478 | 0.539 | | <0.001 |

### Attrition from Referral to Evaluation: REL

Black and Hispanic children are nearly **half** as likely to be evaluated on an initial referral compared to White, Non-Hispanic English-speaking children

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Descriptive %** | | | | **OR** | **95% CI** | | **P-value** (based on contrasts) |
| **Total Sample Size** | | | 92,478 |
| **Percent** | | | 73.6 |
| **Race** | **Ethnicity** | **Language** |  | | | | |
| Asian | Not Hispanic | English | 89.8 | 1.122\* | 0.966 | 1.304 | <0.001 |
| NHPI/AIAN | Not Hispanic | Other | 89.6 | 1.058\* | 0.453 | 2.471 | <0.001 |
| Asian | Not Hispanic | Chinese | 89.4 | 1.039\* | 0.764 | 1.413 | <0.001 |
| White | Not Hispanic | English | 87.8 | ref | ref | ref | <0.001 |
| White | Not Hispanic | Arabic | 87.5 | 0.792\* | 0.604 | 1.040 | <0.001 |
| White | Not Hispanic | Other | 86.7 | 0.889\* | 0.716 | 1.104 | <0.001 |
| White | Not Hispanic | Portuguese | 85.6 | 0.720 | 0.612 | 0.847 | <0.001 |
| Asian | Not Hispanic | Other | 85.4 | 0.720 | 0.613 | 0.844 | <0.001 |
| NHPI/AIAN | Not Hispanic | English | 84.3 | 0.883\* | 0.608 | 1.282 | <0.001 |
| Any Race | Hispanic | Spanish | 83.7 | 0.707 | 0.659 | 0.757 | <0.001 |
| Any Race | Hispanic | Other | 82.9 | 0.673 | 0.532 | 0.851 | <0.001 |
| Multiracial | Not Hispanic | English | 82.3 | 0.700 | 0.634 | 0.772 | <0.001 |
| **Black** | **Not Hispanic** | **Haitian Creole** | **80.6** | **0.559** | 0.457 | 0.683 | <0.001 |
| **Black** | **Not Hispanic** | **Other** | **80.1** | **0.551** | 0.462 | 0.657 | <0.001 |
| **Multiracial** | **Not Hispanic** | **Other** | **79.4** | **0.529** | 0.356 | 0.788 | <0.001 |
| **Black** | **Not Hispanic** | **English** | **78.8** | **0.558** | 0.520 | 0.599 | <0.001 |
| **Any Race** | **Hispanic** | **English** | **78.4** | **0.575** | 0.544 | 0.607 | <0.001 |
| Unknown | Missing | English | 0.6 | 0.001 | 0.001 | 0.001 | <0.001 |
| Unknown | Missing | Missing | 0.1 | 0.000 | 0.000 | 0.000 | <0.001 |

### Attrition from Referral to Evaluation: Referral Source

Children referred by parents are the **most** likely to receive an evaluation (88.9%)

Only 52% of children referred by DCF are evaluated (~70% less likely than children referred by a parent)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Descriptive %** | **OR** | **95% CI** | | **P-value** (based on contrasts) |
| **Total Sample Size** | 92,478 |
| **Percent** | 73.6 |
| **Referral Source** | | | | | |
| Parent/Self-referral | **88.9** | ref | ref | ref | \*\* |
| Early Intervention | 84.2 | 0.849 | 0.757 | 0.952 | <0.001 |
| Primary Care Provider/Pediatrician | 81.6 | 0.936 | 0.883 | 0.993 | 0.007 |
| NICU | 75.6 | 0.760 | 0.676 | 0.856 | <0.001 |
| Community Program/Agency | 73.1 | 0.602 | 0.523 | 0.693 | <0.001 |
| Hospital/Medical facility | 72.7 | 0.664 | 0.604 | 0.729 | <0.001 |
| DCF | **52.1** | **0.319** | 0.3 | 0.339 | <0.001 |
| Other | 33.8 | 0.163 | 0.149 | 0.180 | <0.001 |
| None listed | 1.2 | 0.001 | 0.001 | 0.002 | <0.001 |

\*\* *p*-value <0.001 in similar models

### Eligibility: REL

Children with a spoken language other than English are more likely to be eligible for services compared to the mean, and compared to White, Non-Hispanic English-speaking children

*\*\*Small sample size, large CI*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Descriptive %** | | | | | **OR** | **95% CI** | | **P-value**  (based on contrasts) |
| **Total Sample Size** | | | | 68,703 | |
| **Percent** | | | | 86.7 | |
| **Race** | | **Ethnicity** | **Language** |  | | | | | |
| **NHPI/AIAN** | | **Not Hispanic** | **Other** | **98.3** |  | 10.151 | 1.391 | 74.050 | <0.001\*\* |
| **Black** | | **Not Hispanic** | **Other** | **91.9** |  | 2.124 | 1.617 | 2.790 | <0.001 |
| **Black** | | **Not Hispanic** | **Haitian Creole** | **91.4** |  | 1.942 | 1.442 | 2.615 | <0.001 |
| **Any race** | | **Hispanic** | **Spanish** | **91.3** |  | 1.966 | 1.799 | 2.148 | <0.001 |
| **White** | | **Not Hispanic** | **Arabic** | **90.9** |  | 1.841 | 1.333 | 2.543 | <0.001 |
| **Multiracial** | | **Not Hispanic** | **Other** | **90.7** |  | 1.872 | 1.044 | 3.357 | 0.002 |
| **Any race** | | **Hispanic** | **Other** | **90.5** |  | 1.470 | 1.077 | 2.006 | 0.002 |
| **Asian** | | **Not Hispanic** | **Other** | **90.5** |  | 1.640 | 1.353 | 1.988 | <0.001 |
| **White** | | **Not Hispanic** | **Portuguese** | **90.4** |  | 1.587 | 1.299 | 1.938 | <0.001 |
| Asian | | Not Hispanic | English | 89.8 | | 1.464 | 1.267 | 1.692 | <0.001 |
| Asian | | Not Hispanic | Chinese | 89.5 | | 1.409 | 1.048 | 1.895 | 0.004 |
| Black | | Not Hispanic | English | 88.3 | | 1.496 | 1.366 | 1.639 | <0.001 |
| White | | Not Hispanic | Other | 88.1 | | 1.364 | 1.086 | 1.713 | 0.002 |
| Any race | | Hispanic | English | 87.2 | | 1.433 | 1.342 | 1.529 | <0.001 |
| Multiracial | | Not Hispanic | English | 84.9 | | 1.144 | 1.026 | 1.275 | 0.021 |
| White | | Not Hispanic | English | 84.6 | | ref | ref | ref | 0.250 |
| NHPI/AIAN | | Not Hispanic | English | 83.3 | | 1.057 | 0.724 | 1.542 | 0.417 |
| Unknown | | Missing | Missing | 33.3 | | 0.133 | 0.024 | 0.741 | 0.046 |
| Unknown | | Missing | English | 9.4 | | 0.022 | 0.007 | 0.074 | <0.001 |

### Eligibility: REL

*\*\*Small sample size, large CI*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Descriptive %** | | | | | **OR** | **95% CI** | | **P-value**  (based on contrasts) |
| **Total Sample Size** | | | | 68,703 | |
| **Percent** | | | | 86.7 | |
| **Race** | | **Ethnicity** | **Language** |  | | | | | |
| **NHPI/AIAN** | | **Not Hispanic** | **Other** | **98.3** |  | 10.151 | 1.391 | 74.050 | <0.001\*\* |
| **Black** | | **Not Hispanic** | **Other** | **91.9** |  | 2.124 | 1.617 | 2.790 | <0.001 |
| **Black** | | **Not Hispanic** | **Haitian Creole** | **91.4** |  | 1.942 | 1.442 | 2.615 | <0.001 |
| **Any race** | | **Hispanic** | **Spanish** | **91.3** |  | 1.966 | 1.799 | 2.148 | <0.001 |
| **White** | | **Not Hispanic** | **Arabic** | **90.9** |  | 1.841 | 1.333 | 2.543 | <0.001 |
| **Multiracial** | | **Not Hispanic** | **Other** | **90.7** |  | 1.872 | 1.044 | 3.357 | 0.002 |
| **Any race** | | **Hispanic** | **Other** | **90.5** |  | 1.470 | 1.077 | 2.006 | 0.002 |
| **Asian** | | **Not Hispanic** | **Other** | **90.5** |  | 1.640 | 1.353 | 1.988 | <0.001 |
| **White** | | **Not Hispanic** | **Portuguese** | **90.4** |  | 1.587 | 1.299 | 1.938 | <0.001 |
| Asian | | Not Hispanic | English | 89.8 | | 1.464 | 1.267 | 1.692 | <0.001 |
| Asian | | Not Hispanic | Chinese | 89.5 | | 1.409 | 1.048 | 1.895 | 0.004 |

**Are they truly more likely to be eligible, or does something get lost in translation during the BDI -2? Cultural differences in behavior? Are only the children from these groups with the most needs making it to an evaluation?**

Black Not Hispanic English 88.3 1.496 1.366 1.639 <0.001

White Not Hispanic Other 88.1 1.364 1.086 1.713 0.002

Any race Hispanic English 87.2 1.433 1.342 1.529 <0.001

Multiracial Not Hispanic English 84.9 1.144 1.026 1.275 0.021

White Not Hispanic English 84.6 ref ref ref 0.250

NHPI/AIAN Not Hispanic English 83.3 1.057\* 0.724 1.542 0.417

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Unknown | Missing | Missing | 33.3 | 0.133 | 0.024 | 0.741 | 0.046 |
| Unknown | Missing | English | 9.4 | 0.022 | 0.007 | 0.074 | <0.001 |

### Eligibility: Referral Source

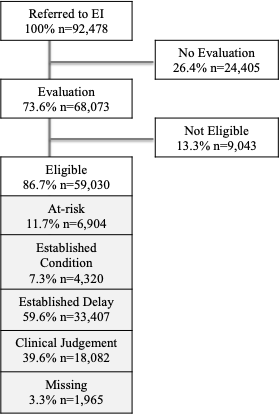
Children referred by Child Care Centers and DCF are the least likely to be eligible compared to the mean

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Descriptive %** | **OR** | **P5% CI** | | **P-value** (based on contrasts) |
| **Total Sample Size** | 68,703 |
| **Percent** | 86.7 |
| **Referral Source** | | | | | |
| NICU | **94.4** | 2.745 | 2.305 | 3.268 | <0.001 |
| Early Intervention | **94.2** | 2.120 | 1.787 | 2.514 | <0.001 |
| Hospital/Medical facility | **93.7** | 2.146 | 1.864 | 2.470 | <0.001 |
| DPH Program/Service | **91.6** | 1.454 | 0.894 | 2.366 | <0.001 |
| Parent/Self-referral | **88.5** | ref | ref | ref | \*\* |
| Primary Care Provider/Pediatrician | **88.3** | 1.052\* | 0.993 | 1.116 | <0.001 |
| Community Program/Agency | **86.8** | 0.868\* | 0.731 | 1.031 | <0.001 |
| Other | 85.4 | 0.886\* | 0.755 | 1.041 | <0.001 |
| Child Care Center or Provider | 78.9 | 0.601\* | 0.533 | 0.678 | <0.001 |
| DCF | **74.2** | **0.401** | 0.374 | 0.430 | 0.002 |

* Indicates insignificant *p*-values based on odds ratios.
* \*\* *p*-value <.001 in similar models

### Key Statistically Significant & Clinically Relevant Findings

Less likely to be evaluated



* Hispanic children of any race
* Black not Hispanic and multiracial children who have a preferred spoken language of English
* Black not Hispanic children who have a preferred spoken language of Haitian Creole
* Children < 12 months old at first

referral

* Children referred by DCF

**Less likely to be eligible** Children referred by childcare centers and DCF

**More likely to be eligible** Children who do not have a preferred spoken language of English

**Do Part C Leaders agree with these findings? What is being done to address these gaps in care?**

Qualitative Research Methods

**22 interviews conducted from April – December 2023**

* Recruitment**:**
  + 12 Part C Coordinators
  + 10 MA Program Directors
* 1-hour semi-structured in- depth interviews
* Recorded and transcribed using Zoom
* 2 Research Assistants



### “Which group of children do you worry most about in your program and why?”

* + Children living in rural communities and indigenous tribal lands
  + Under representation of Black and Hispanic children
  + Children under age 1
  + Children at-risk vs established conditions
  + Children with low incidence conditions
  + Children of caregivers with cognitive delays, untreated mental health conditions, substance use disorders, and domestic violence in the home
  + Children of undocumented parents

●

●

●

**Non-English speaking families** (who rely on language line)

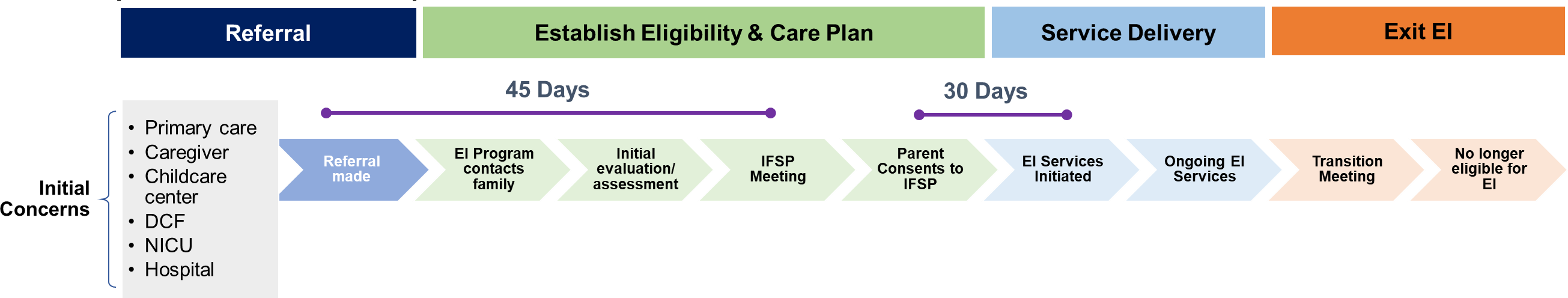
Haitian-Creole Speaking families Children involved in DCF

 = Finding supported by

quantitative results

### “Where do you lose the greatest number of children in your care cascade and why?”

EI”



**Non-self referrals**

**“It’s hard to be in**

***“The people who have not self-referred, who have been directed and told you need to go to early intervention and have no idea who we are. They’re the people that we have the hardest time in connecting with and engaging”***

MA Program Director

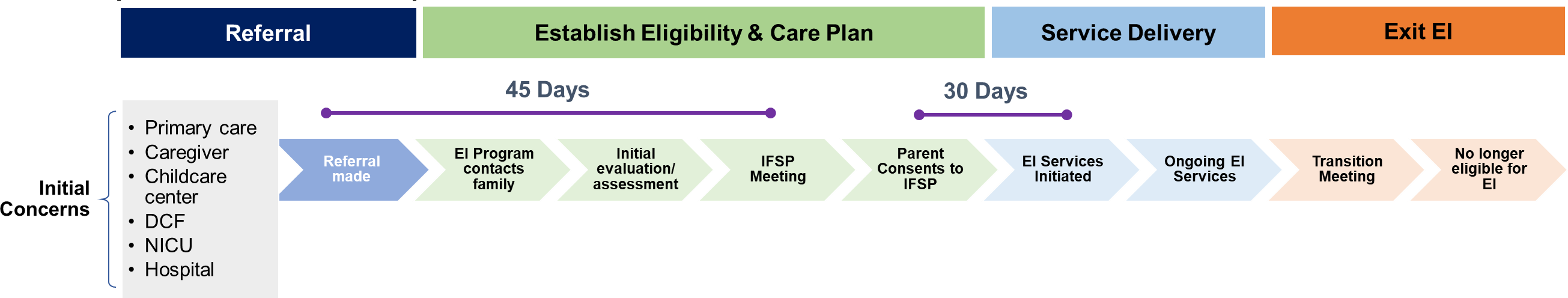
# Strategies to Address Equity & Family Engagement

*\*As described*

1. Audits & Action Plans
2. Baseline+
3. Child Find
4. Contracting
5. Data-Based Decision-Making
6. Funding Formulas
7. Hiring and retaining diverse staff
8. Parental Support
9. Partnerships
10. Place-based Care
11. Professional Development
12. Relationship Building
13. Tailoring
14. Translation & Interpretation

*by interviewees*

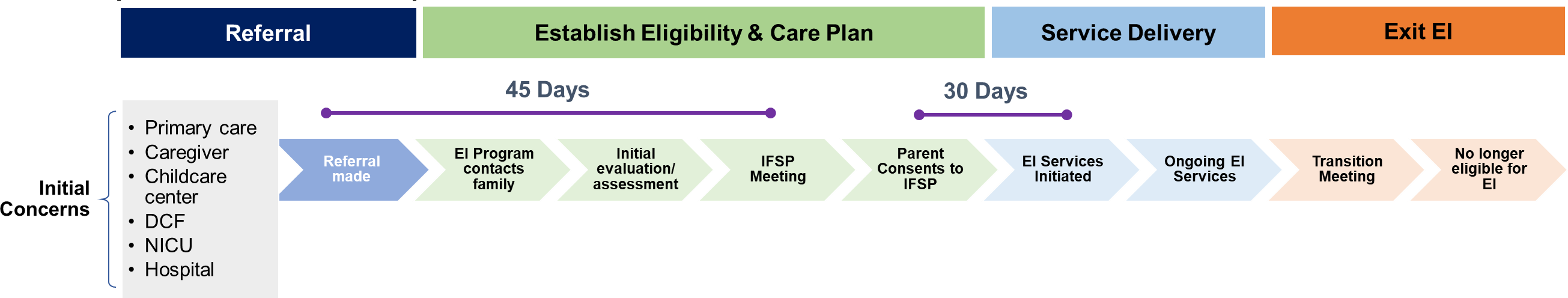
### Strategy: Robust Child Find



Lead agency monitors a state-wide outreach plan so that programs are required to contact all primary referral sources in their catchment area at least once a year. Outreach efforts are tracked and reported to the state.

**Why this helps**: Increases awareness of EI among referring providers and streamlines messaging so that potentially eligible families receive accurate information about services and referral processes

### Strategy: Baseline+



Programs offer high-quality baseline services for all families but create systems to tailor and individualize

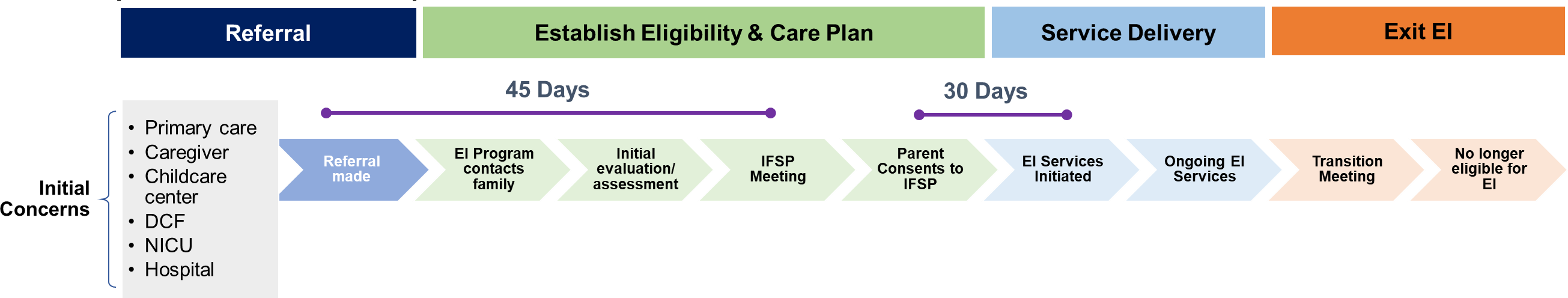
**based on families' needs**

*Example: Create different intake processes for families that are not self/parent referrals so that they fully*

*understand what EI is and the expectations*

**Why this helps**: Allows programs to create separate systems to identify family barriers that may prevent them from feeling comfortable to enter EI

### Strategy: Relationship Building & Parental Supports



Programs create systems and partnerships to provide individualized support to families. Examples:

* Programs assign a consistent staff person from intake through IFSP meetings for continuity of care
* Programs offers family support groups during playgroups
* Lead agencies and programs contract with community groups to offer peer support and family trainings

**Why this helps**: “…if you develop a relationship with the family, we're generally finding that there's a lower rate of cancellations and no shows” (MA Program Director)

##### Strategy: Utilize ICCs and contracts with local organizations as bridges between the Part C system, families, and the community

###### ICC

* Collaboratively engage in systems-level changes
* Primary way families are engaged

at state-level

* Subcommittees used to drive change (i.e. reviewing documents for family-friendly language)

Community

Families

Lead Agency

###### Contracts to Integrate Family Support Positions & CHWs

* Contract with programs that specialize in CHWs
* Require contracted EI service providers to have family support positions on staff (i.e. a CHW or parent with lived experience)

###### Community Partnerships

Local Partners: Libraries, daycares, community

resource centers, WIC

Local Contracts: Universities, researchers, consultants,

community-based training programs

EI Providers

**Why this helps**: Builds a coordinated system of care; improved communication; EI staff are visible in their communities so that families may feel more comfortable engaging in services; peer support

##### Strategy: Data-Based Decision Making

Establish Data Systems

Regular Data Monitoring

Data Inquiries

Data-Based Decision-

Making

|  |  |  |  |
| --- | --- | --- | --- |
| *“You know, we have weird things in our data system that doesn’t allow us to really accurately collect people’s tribal affiliation.”* (Part C Coordinator) | *“We compare the data that we're getting on referrals at each of our programs and look at the racial-ethnic breakdown of those referrals and compare that to the population from the census data.”* (Part C Coordinator) | Does enrollment data mirror the population?  Do staff mirror the population  being served?  Are materials and interpreters available in the appropriate languages?  Where are children falling out of  the care cascade? | * Conduct targeted outreach to catchment areas with lower enrollment rates * Translate materials * Hire in-person interpreters * Implement funding   formulas |

**Qualitative Example of Data-Based Decision-Making**

*“They [cultural liaisons] review all of our statewide materials, and they are starting to, not just for translating, although they also vet*

*the translations that we do. But they also are making sure that they're culturally supportive resources and that they make sense. Everything from photos to language that's written into the information.* ***The way things are presented, thinking, helping us think through like more using more videos and audio instead of written because of communities here that don't use written language to share knowledge who share through storytelling****.”* (Part C Coordinator)”

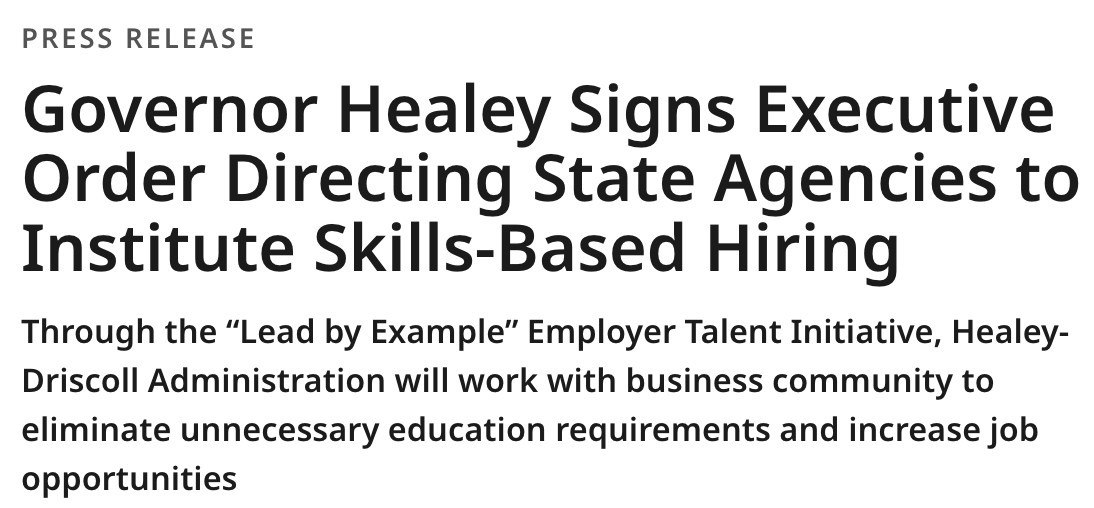
**What Now?**

**Synthesis & Recommendations**

### Recommendations

|  |  |
| --- | --- |
| **1** | Strengthen relationships with DCF to improve parent education and referrals |
| **2** | Foster relationships with Haitian communities and organizations to increase awareness about careers in EI and EI services |
| **3** | Train program directors in data-based decision-making to utilize and apply data regularly to inform ongoing work |
| **4** | Implement community action plans to drive local changes |
| **5** | Formalize the Parent Liaison position by aligning it with the core components of Family Navigation, a form of CHWs |

**Recommendations**



|  |  |
| --- | --- |
| **1** | Strengthen relationships with DCF to improve parent education and referrals |
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**Concluding Remarks**

### Study Limitations

Administrative data subject to human error and missing data

New data system during study period

Only followed a first referral

“Post-COVID” cohort was a gradual return to “normal”

Generalizability beyond MA

Does not measure the impact or efficacy of the strategies presented

Missing the parent/family perspective

## Thank you to the 22 participants who volunteered their time and shared their expertise with me

Thank you to Drs. White and Fitzgerald Lewis, and the Early Intervention Division, who welcomed me onto their teams and made this research possible

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**Thank you!**



**Questions & Discussion**

**Pennie Theodorou, DrPH, MPH**

**Discussion Questions**

1. What resonates with you about these findings?
2. How can we foster more self/parent referrals?
3. How can this Subcommittee apply these findings?
4. What are the key points from this presentations that the rest of the ICC should know about?