

REPORT TO THE TWENTY-FOURTH LEGISLATURE

STATE OF HAWAII

2008

PURSUANT TO SENATE CONCURRENT RESOLUTION 70, H.D. 1,
SLH 2006,
REQUESTING THE DIRECTOR OF HEALTH TO CONVENE A TASK FORCE
TO DETERMINE A MEANS FOR A CHILD TO BE SCREENED PRIOR TO
THE START OF THE CHILD'S EDUCATION, AT THE CHILD'S FIRST
ENTRY INTO PRESCHOOL AND ELEMENTARY SCHOOL, TO PROVIDE
FOR DIAGNOSIS, REFERRAL, CORRECTION OR TREATMENT, AND TO
INTEGRATE THE EFFORTS OF COMMUNITY AND STATE
ORGANIZATIONS RELATED TO SCREENING UNDER THIS HAWAII
CHILDHOOD SCREENING INITIATIVE

PREPARED BY:
STATE OF HAWAII
DEPARTMENT OF HEALTH
HEALTH RESOURCES ADMINISTRATION
FAMILY HEALTH SERVICES DIVISION
CHILDREN WITH SPECIAL HEALTH NEEDS BRANCH

NOVEMBER 2007

EXECUTIVE SUMMARY

This report summarizes the efforts of Screening Task Force members and professional and state/community partners to improve screening for young children in Hawaii. These efforts include:

- A. Selection of standardized developmental screening tools for children from birth through age eight years of age:
 - American Academy of Pediatrics-Hawaii Chapter adopted a position statement on developmental surveillance and screening.
 - EPSDT guidelines specify screening tools for developmental, hearing, and vision screening.
 - Hawaii Optometric Association has identified vision screening tools for preschool and third-grade children.
- B. Referral protocols:
 - Flow chart of community resources for follow-up for developmental concerns was updated.
- C. Guidelines for reporting the completion of a child's screening requirement for children entering preschool or elementary school:
 - A template letter was developed for community programs to share developmental screening results with the medical home.
 - Healthy Child Care Hawaii developed an Early Childhood Health Record form which includes a primary care provider's report of screening results.
- D. Issues related to physician participation:
 - Hilopa'a Project and Department of Health/Maternal and Child Health Branch provide Parents' Evaluation of Developmental Status (PEDS) and Ages and Stages Questionnaire (ASQ) developmental screening training for health providers.
 - American Academy of Pediatrics-Hawaii Chapter and University Health Alliance collaborated in a quality initiative for well child visits.
- E. Compliance and appropriateness of referrals:
 - Department of Health/Family Health Services Division requests for proposals for primary care and parenting education/support services included standardized developmental screening for children age 0-5 years.
 - Department of Human Services/Med-QUEST Division is implementing a new Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) reporting form which includes screening and referrals.

Areas for further action include:

- A. Improve vision and/or hearing screening for preschool and school-aged children.
- B. Address barriers to screening by primary care providers. These barriers include office staffing, time, training, cost of tools, and payment issues.
- C. Review "Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents" (2007) for updated screening guidelines.

Screening Task Force

Senate Concurrent Resolution SCR 70 HD 1

The 2006 Hawaii State Legislature, in S.C.R. 70, H.D. 1, requested the Director of Health to convene a task force to determine a means for a child to be screened prior to the start of the child's education, at the child's first entry into preschool and elementary school, to provide for diagnosis, referral, correction or treatment, and to integrate efforts of community and state organizations related to screening under this Hawaii childhood screening initiative. Purposes of the task force, as specified by S.C.R. 70, H.D. 1, are:

- (1) Plan and implement a statewide screening initiative for all children from birth to eight years of age.
- (2) Develop and implement a screening certification program for children entering preschool and elementary school.
- (3) Unify screening-related activities in the state by January 1, 2007.

S.C.R. 70, H.D. 1, requested the task force to:

- Recommend selection of standardized developmental screening tools for children from birth through age eight years of age, including but not limited to:
 - Cognitive development
 - Language development
 - Motor development
 - Adaptive skills
 - Behavioral or social-emotional development
 - Hearing
 - Vision
- Formalize referral protocols.
- Develop guidelines for reporting the completion of a child's screening requirement for children entering preschool or elementary school.
- Address issues related to physician participation.
- Evaluate compliance and appropriateness of referrals.
- Submit to the Legislature an annual report no later than 20 days before the start of each regular session, beginning with the Regular Session of 2007, on any recommended legislation necessary to implement the program.

Screening Task Force Members

Representatives who have participated at Task Force meetings included:

- American Academy of Pediatrics (AAP) - Hawaii Chapter
- Department of Education (DOE)
- Department of Health (DOH)
 - Children with Special Health Needs Branch
 - Maternal and Child Health Branch
 - Public Health Nursing Branch

- Department of Human Services (DHS)
- Family Voices of Hawaii
- Hawaii Early Intervention Coordinating Council
- Hawaii Optometric Association
- Hawaii Speech-Language-Hearing Association
- Hawaii State Council on Developmental Disabilities
- Hawaii State Teachers Association
- Healthy Child Care Hawaii Project
- Hilopa‘a Project
- University of Hawaii (UH), John A. Burns School of Medicine, Dept. of Pediatrics

Screening Task Force Meetings

Screening Task Force meetings and discussion areas:

October 31, 2006	Overview of screening in Hawaii, including data, guidelines, requirements, procedures/tools, resources for follow-up of screening concerns, barriers to screening, training on screening, and follow-up.
November 16, 2006	Former DOH School Health Hearing and Vision Program. Screening in a pediatric office. Issue of insurance payment for screening.
May 3, 2007	Current status of hearing and vision screening. Community vision screening projects in preschools and schools. Vision screening tools. Approaches (and challenges) to improving vision and hearing screening.
June 7, 2007	Request from teachers to reinstate vision screening in schools. Approaches (and challenges) to improving vision and hearing screening.

Efforts to Improve Screening

Efforts of Screening Task Force Members and State/Community Partners

A. Selection of standardized developmental screening tools for children from birth through age eight years of age

American Academy of Pediatrics-Hawaii Chapter – position statement on developmental screening

The AAP-Hawaii Chapter adopted a position statement on “Development Surveillance and Screening in the Medical Home” (www.hawaii.aap.org/pospapers.htm). The AAP-Hawaii Chapter will work to enable pediatric providers to perform developmental surveillance at every well-child visit and do developmental screening using a standardized screening tool at 9, 18, and

24 month visits or when a concern is expressed. Recommended standardized screening tools included Parents' Evaluation of Developmental Status (PEDS) and Ages and Stages Questionnaire (ASQ).

Development of the position statement was based on information including: (a) American Academy of Pediatrics. Policy Statement - Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening. *Pediatrics* 2006;118:405-420. (b) Gupta VB, Hyman SL, Johnson CP, et al. Identifying Children with Autism Early. *Pediatrics* 2007;119:152-3. (c) Criteria for selecting tools for general developmental screening. (d) Comparison of screening tools listed in the AAP Policy Statement on surveillance and screening.

EPSDT – developmental, hearing, and vision screening

DHS Med-QUEST Division revised its EPSDT Periodic Screening Guidelines in July 2007. The guidelines include surveillance for hearing, vision, and development/behavior at all visits.

Screening includes:

- Development: PEDS/ASQ at ages 9, 12, and 18 months; 2, 3, 4, and 5 years
- Hearing: Audio (20-25 db screen) at age 4-6 years
- Vision: Snellen/Allen – at ages 3, 4, 5, 6, 8, 10, 12, 15, 18, and 20 years

Hawaii Optometric Association – vision screening tools

Hawaii Optometric Association's recommended screening tools for preschool and school vision screening programs are:

- Pre-school Vision Screening Kits (ages 2-4 years):
 - Massachusetts Lea Symbols Flipchart for 3 and 4 year olds
 - Massachusetts Lea Symbols and Sloan Letters for Near Test
 - Lang Stereo II Test
- School Age Vision Screening Kits
 - Massachusetts HOTV Flipchart Set
 - Massachusetts HOTV and Sloan Letter Near Vision Test
 - Lang Stereo II Test
 - Plus Lens Flipper for testing Latent Hyperopia (farsightedness)
 - Color Vision Test

Further action needed

Consensus is needed about vision screening tools, best practices for vision screening, and guidelines for vision screening.

“Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents” (AAP, 2007) is a comprehensive set of health supervision guidelines, including recommendations of routine health screenings for children ages 0-21 years. Existing guidelines will need to be compared with the updated Bright Futures guidelines.

B. Referral protocols

Updated flow chart of community resources for follow-up for developmental concerns

“Developmental Screening: A Guide for ASQ and PEDS Referrals for Children Age 0-5 Years” (*see Appendix A*) is a flow chart of community resources for follow-up for developmental concerns identified through screening. This flow chart was updated to recognize that either ASQ or PEDS may be the initial screen for primary care providers. Children age 0-3 years with developmental concerns may be referred to early intervention services provided by the DOH Early Intervention Section and contracted programs. Children age 3-5 years with developmental concerns may be referred to the DOH Preschool Developmental Screening Program or DOE Preschool Special Education.

Training on referral protocols

The Hilopa‘a Project and DOH Maternal and Child Health Branch provide information on the flow chart and related community resource as part of the PEDS and ASQ training for community physicians, their office staff, and pediatric and family practice residents (physicians-in-training).

The Hilopa‘a Project included the flow chart and related community resource information and referral forms in “Rainbow Book – A Medical Home Guide to Resources for Children with Special Health Care Needs and Their Families”. Rainbow Book training has been provided to individuals from 37 distinct agency or program sites. Participants have included professionals, graduate students, residents, as well as family members and self advocates, and are well represented across disciplines. These include audiologists, care coordinators/case managers, community advocates, dental hygienists, educators, families, health care administrators, nurses, nutritionists, physicians, psychologists, rehabilitation therapists, social workers, and others. These individuals make referrals, coordinate with the medical home, provide information, and support families to achieve the goals of the child/family.

C. Guidelines for reporting the completion of a child’s screening requirement for children entering preschool or elementary school

Letter for community programs to share developmental screening results with the child’s medical home

A template letter has been developed to share results of ASQ screening by community providers with the child’s medical home (primary care provider). The letter includes screening results (within normal limits, borderline, below average) for communication, gross motor, fine motor, problem-solving, and personal/social-emotional. This form is being recommended for use by community programs using the ASQ. The template letter was developed by the Universal Screening Committee of the Early Childhood Comprehensive System initiative. The committee included representatives from DOH (Maternal and Child Health Branch, Children with Special Health Needs Branch), UH Department of Pediatrics, and Family Voices.

Early Childhood Pre-K Health Record Supplement

A DHS “Early Childhood Pre-K Health Record Supplement” form includes developmental screening results, behavioral/social emotional concerns, and follow-up/recommendations, and is to be used in conjunction with the DOE School Health Record. The form is intended to be

completed by primary care providers for children attending early childhood programs. This form is being piloted at several early childhood programs. The form was developed by the Healthy Child Care Hawaii Project (HCCH), with input from community providers. HCCH, funded by DHS, is a collaborative effort of the UH Department of Pediatrics, AAP-Hawaii Chapter, and DOH Children with Special Health Needs Branch.

D. Issues related to physician participation

Training for providers on screening tools and referral protocols

The Hilopa‘a Project and DOH Maternal and Child Health Branch provide PEDS and ASQ training for community health centers, community physicians and their office staff, and pediatric and family practice residents (physicians-in-training). Informational materials include the flow chart and related community resource information.

AAP-Hawaii Chapter and University Health Alliance quality initiative for well child visits

AAP-Hawaii Chapter and University Health Alliance (UHA) collaborated in developing the Pediatric Health Screening form, a quality initiative for pediatric preventive health examinations. The form includes hearing/language screening at 6 and 12 months; 2, 5, 12, 14, and 18 years. The form also includes developmental surveillance at 6, 12 months; 2 years. UHA will pay physicians an additional fee above the standard well-child visit fee for completed forms.

Further action needed

Barriers to screening need to be addressed. These barriers include office staffing, time, training, cost of tools, and payment issues (CPT codes, RVUs, insurance payment, etc.). The AAP-Hawaii Chapter position statement on development surveillance and screening states “Developmental surveillance and standardized screening are resource intensive and therefore implementation of these services is dependent upon appropriate payment and thoughtful resource allocation.”

E. Compliance and appropriateness of referrals

DOH Family Health Services Division requests for proposals for primary care and parenting education/support services include developmental screening

The DOH Family Health Services Division Request for Proposals for Comprehensive Primary Care Services (HTH 595-07-03, issued 9/1/06) required the provision of a comprehensive physical examination for children within 6 months of an initial episodic visit and then at intervals following the EPSDT periodicity schedule. The physical examination should include developmental screening (physical and social-emotional) for all children age 5 years and under with PEDS and/or ASQ and ASQ-Social-Emotional (SE), documentation of findings, and referral as necessary. A performance measure is “At least 80% of all children five years old and under will have received a developmental screening with a standardized tool.” Comprehensive primary care services are for uninsured families under 250% of the federal poverty level.

The DOH Maternal and Child Health Branch Requests for Proposals for Parenting Education and Support (HTH 550-12 to 16, issued 10/18/06) required that all children under age 6 years will be screened using the ASQ and ASQ-SE, referral/linkage with other providers will be made as

needed, parents will be supported and encouraged to seek services when referral is indicated, ASQ results will be provided and explained to the parents, and ASQ results will be sent to the child's health care provider, with parent consent. Parenting education and support services are for parents raising children exposed to violence, through respite services, through parent-child mobile outreach services, through trained volunteers, and through Parent Line and HomeReach.

EPSDT Reporting Form

DHS Med-QUEST Division implemented a new EPSDT reporting form to be used throughout the Medicaid programs to report the health status of all children in the programs during their well child visits. The form includes reporting of surveillance and screening for hearing, vision and development/behavior (*see Section A*). The form includes identifying referrals to H-KISS, DOE, developmental/behavioral specialists, and other community resources. The form also includes care coordination assistance needed, such as for scheduling/keeping appointments or obtaining specialty services. The standardized form offers the opportunity for quality improvement based upon data gathered on the EPSDT forms.

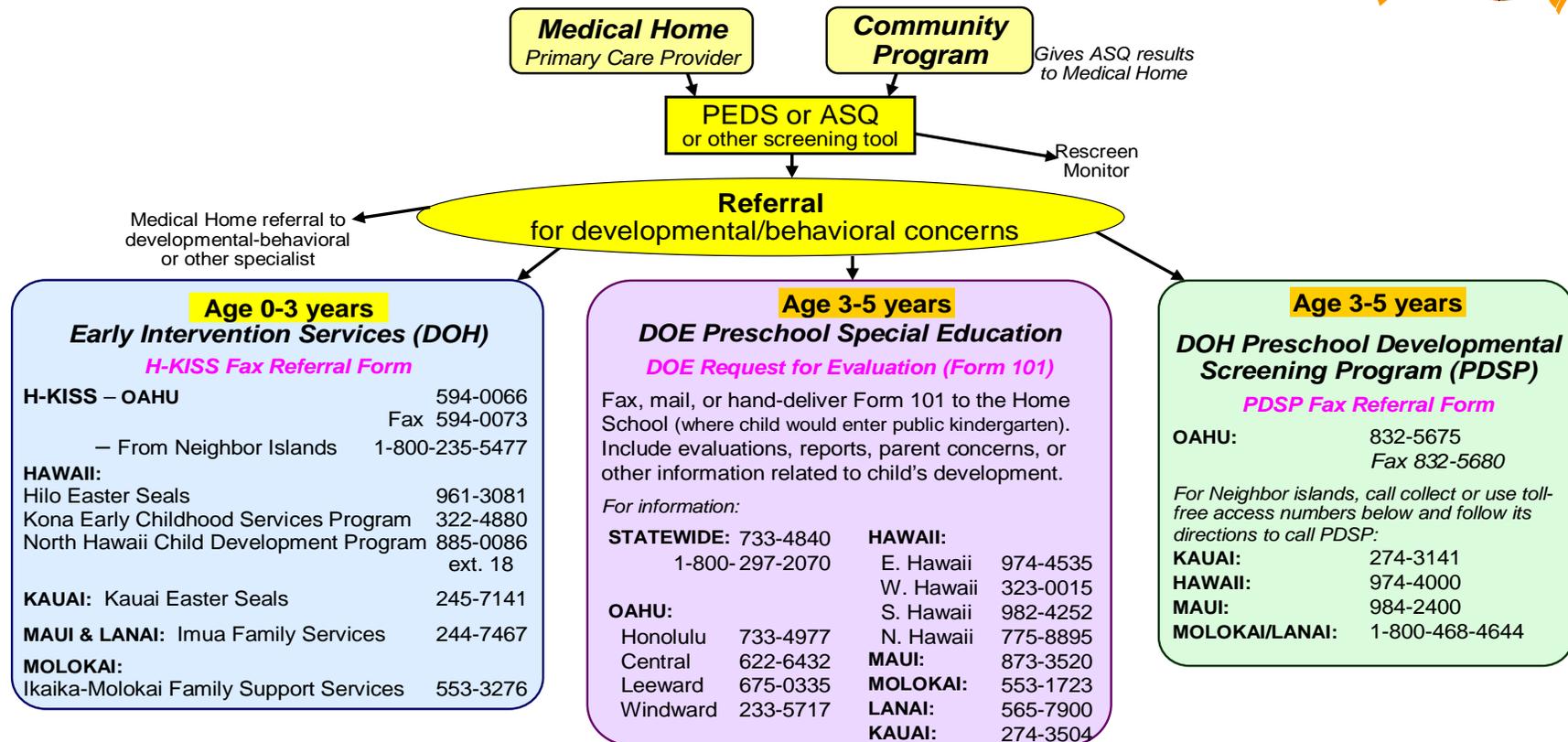
Further action needed

Hearing and vision screening and follow-up data (see Appendix B) for preschool and school-aged children indicate a need for further improvement. Approaches (see Appendix C) to promote improve vision and/or hearing screening and follow-up include:

- *School vision and/or hearing screening program with community partnership.*
- *Community-initiated preschool and school vision screening.*
- *Supporting screening and follow-up by primary care providers.*
- *Family and community education about vision and/or hearing screening and follow-up.*
- *Legislation requiring vision and/or hearing screening prior to school entry.*
- *Legislation requiring insurance coverage of health supervision for age 6+ years.*

Appendix A

Developmental Screening: A Guide for ASQ and PEDS Referrals for Children Age 0-5 Years



Early intervention services include:

- Assistive technology (AT)*
- Audiology
- Care coordination
- Family training, counseling, & education
- Health services
- Nursing services
- Nutrition services
- Occupational therapy
- Physical therapy
- Psychological support services
- Social work
- Special instruction
- Speech & language therapy
- Transportation to EI services
- Vision services

*AT may have insurance/family cost-sharing.

Special education is specially designed instruction to meet the unique learning needs of students with disabilities who required Individualized Education Programs. Related services include:

- Speech-language therapy
- Audiology
- Psychological services
- Physical therapy
- Occupational therapy
- Counseling services
- Parent counseling and education

PDSP services include:

- Developmental screening & rescreening
- Information to family about activities for child in motor, speech, language, other areas
- Intervention strategies for early childhood programs & families
- Referral for speech/language, psychological, or other evaluations
- Referral to DOE special education
- Referral to community resources (e.g., Head Start)
- Referral for speech therapy or private mental health counseling (may have family/insurance costs).

Appendix B
Hawaii Data on Hearing & Vision Screening and Follow-Up

Newborns and Infants	
<p style="text-align: center;"><i>Newborn Hearing Screening, 2006</i> <i>Data from DOH Newborn Hearing Screening Program</i></p> <p><u>Hearing</u></p> <ul style="list-style-type: none"> • 98.4% newborns were screened for hearing before hospital discharge. • 60% infants with hearing loss received appropriate intervention services by age 6 months. 	<p style="text-align: center;"><i>Vision Photoscreener Pilot Project, 1999</i> <i>Data from DOH Children with Special Health Needs Branch</i></p> <p><u>Vision</u></p> <ul style="list-style-type: none"> • Of 520 children age 0-3 years with or at biological risk for developmental delays receiving early intervention services, 64 (12.3%) children, who were not known to have eye/vision problems, failed screening. • Of completed follow-ups for 41 children, 36 had eye/vision problems: astigmatism (13), ocular misalignment (10), hyperopia (8), myopia (6), amblyopia (3), possible cortical blindness (2), cortical scratch (2), optic nerve atrophy (1), abnormal visual fixation (1), ptosis (1), other (1).
Preschool-Aged Children	
	<p style="text-align: center;"><i>Vision Screening in 8 Preschools, Kaimuki to Hawaii Kai, Fall 2006</i> <i>Data from Hawaii Kai, Kaimuki, and Koko Head Lions Club</i></p> <p><u>Vision</u></p> <ul style="list-style-type: none"> • Of 463 preschool-aged children screened for vision, 106 (23%) did not pass and were referred. <p><i>Screening for: distance vision; near vision; binocular vision – stereopsis/depth perception.</i></p>
School-Aged Children	
	<p style="text-align: center;"><i>Vision Screening in 8 Schools (3rd Grade), West Hawaii, 2006-2007</i> <i>Data from Rotary Club of Kona</i></p> <p><u>Vision</u></p> <ul style="list-style-type: none"> • Of 464 children (3rd grade) who were screened, 227 (49%) did not pass screening and were referred. <p><i>Screening for: distance visual acuity; far-sighted flippers test; near vision acuity; stereo vision.</i></p>

Hearing and Vision Screening Study in School-Aged Children, Leeward and Central Districts 1999-2000

Data from DOH Children with Special Health Needs Branch

Hearing

- Of 1,293 children screened for hearing, 5.5% did not pass and were referred for follow-up. *Hearing screening in Preschool, K, 1, and 2, and for special requests.*

Vision

- Of 1,925 children screened for vision, 3.6% did not pass and were referred for follow-up. *Vision screening at 6 elementary and middle schools for: far vision acuity (grades 1, 5, and 7, and special education); color blind test (grade 2); cover/light (preschool).*

Statewide Hearing and Vision Screening and Follow-Up, School Year 1994-1995

Data from the former DOH School Health Hearing and Vision Program

Hearing

- Of 72,896 students screened, 5.8% (4,259) students did not pass and were referred for follow-up.
- Of 2,924 completed follow-ups, 2,319 (79.3%) had deficits. 1,258 were diagnosed with otitis media, 521 with cerumen or foreign body obstruction, and 145 with sensorineural hearing loss.
- Treatment included: medication (1,215), cerumen or foreign body removal (452), surgery (153), and amplification (21).

Vision

- **Far vision acuity:** Of 43,974 students screened, 1,372 (3.3%) did not pass and were referred for follow-up. Of 994 completed follow-ups, 897 had vision deficits including myopia (676), astigmatism (165), hyperopia (79), and amblyopia (33). Treatment included new prescribed lenses (714).
- **Color-blindness testing:** Of 12,609 students (2nd grade) who were tested, 373 (3.0%) failed.
- **Cover/light screening:** Of 15,755 students screened, 35 (0.2%) were referred for follow-up. Of 13 completed follow-ups, 9 showed deficits.
- **Near vision acuity:** Of 707 students tested, 34 (5.4%) were referred for follow-up. Of 24 completed follow-ups, 18 showed deficits.

Appendix C

Approaches to Improving Vision and/or Hearing Screening

Strategy: School vision and/or hearing screening program with community partnership.

- Description:** State-funded school vision and/or hearing screening program in DOE or DOH to provide screening for all children in specified grades (with parent consent). School/community volunteers assist with logistics. Children who fail screens are referred to their primary care provider (medical home) for follow-up.
- Screening issue(s) addressed:** Some children with hearing and vision problems are not being identified early, and may not have optimal hearing and vision to support their learning in school. A school screening program can systematically screen & provide follow-up for children with hearing or vision concerns.
- Note:* The former DOH Hearing and Vision Screening Program was abolished in 1995 due to severe budget restrictions. Changes in the delivery system since 1995 include: (a) statewide newborn hearing screening; (b) increased funding to community health centers for the uninsured; (c) expansion and increased enrollment of children in State Child Health Insurance Program.
- Legislative action needed:** Re-establish a state-funded school vision and/or hearing program by providing state funds. State law HRS §321-101 may need to be amended. Estimated cost is unknown and will depend on program staffing and whether the programs screens for only vision or both vision and hearing.
- Challenges:** Legislative, state, community, and professional support are needed to establish a screening program with adequate funding and staff resources.

Strategy: Community-initiated preschool and school vision screening.

- Description:** Organizations initiate a screening project at a school(s) in their community. Organizations work collaboratively with the school to implement screening. The school will be responsible for follow-up.
- Screening issue(s) addressed:** Some children with hearing or vision problems are not being identified early and may not have optimal hearing or vision for learning.
- Challenges:** Community organizations may not be able to provide screening in all schools. Community organizations may have difficulty in finding volunteers and sustaining interest. Community volunteers need training on conducting screening efficiently and with high quality. Community organizations may need funds to purchase screening tools.
- Community volunteers do not do follow-up. Schools may need additional staff to assist with referrals and follow-up.

Strategy: Supporting screening and follow-up by primary care providers

Description: Activities to support hearing and vision screening conducted by primary care providers (PCPs) (or office staff) may include addressing screening and referral guidelines, training, payment, and cost of screening tools.

Screening issue(s) addressed: Primary care providers (600+) vary in their hearing and vision screening practices and whether they follow EPSDT or American Academy of Pediatrics guidelines. PCPs include pediatricians, pediatric specialists, family physicians, community health centers, general practice, internal medicine, etc.

Challenges: Barriers to physician screening include staffing, time, equipment/tools, payment, and training.

Primary care providers need to have adequate insurance payment for their screening services, and may face difficulties obtaining adequate payment.

Strategy: Family and community education about vision and/or hearing screening and follow-up.

Description: Education for families and community may include the importance of hearing and vision screening and follow-up, indications that a child may have a hearing or vision problem, going to their primary care provider (medical home) for screening, follow-up when screening identifies a concern, and resources for eligible children without adequate insurance coverage.

Screening issue(s) addressed: Families have an important role in ensuring that their children receive screening and follow-up.

Children who fail screening must have appropriate follow-up/treatment (e.g., evaluation by a health professional, eyeglasses, hearing aids, etc.) in order to benefit from screening. (*Note:* For eligible students who do not have insurance coverage, community resources such as the Hawaii Lions Foundation Uninsured-Underinsured Fund for Hearing and Vision Services may assist with hearing/vision evaluations, glasses, hearing aids, etc.)

Legislative action needed: Legislative provision of funding for family and community education on hearing/vision screening and follow-up,

Challenges: Legislative and state support for this family and community education.

Education is effective in increasing the number of children who have screening and follow-up.

Strategy: Legislation requiring vision and/or hearing screening prior to school entry

Description:	Requirement for hearing and vision screening prior to initial school entry (and/or before entry to middle school).
Screening issue(s) addressed:	There is no requirement for hearing or vision screening for school enrollment.
Legislative action needed:	Passage of laws requiring hearing and vision screening at school entry (similar to HRS §302A-1154, 1159, & 1161).
Challenges:	Legislative, state, community, and professional support are needed for this requirement. Schools may need additional staff to ensure compliance with this requirement. Primary care providers need to have adequate insurance payment for their screening services. Children who acquire hearing or vision loss after school entry may be missed.

Strategy: Legislation requiring insurance coverage of health supervision for age 6+ years

Description:	Requirement for health insurance to cover health assessments for children age 6 years and older. These assessments include hearing and vision screening.
Screening issue(s) addressed:	Existing laws require health insurance coverage for child health supervision (which includes screening) only for children under age 6 years. Some families of children age 6+ years face high out-of-pocket costs for health assessments and may forego such assessments because of cost and miss screening.
Legislative action needed:	Passage of laws on coverage for child health supervision services for children age 6 years and older (similar to HRS §431:10A-115.5, §431:10A-206.5, §432:1-602.5, on child health supervision for children under age 6 years).
Challenges:	Legislative, state, community, professional, and health insurance support are needed for this requirement. There may be concerns that health insurance costs may rise in order to cover health assessments. This may or may not address insurance payment issues related to screening.