

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 434  
(A-24)

Introduced by: Michigan  
Subject: Universal Newborn Eye Screening  
Referred to: Reference Committee D

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- 1 Whereas, Red Reflex Testing (RRT) is the current standard of care for newborn eye screening  
2 in the United States; and  
3  
4 Whereas, there are approximately 3.7 million live births in the United States per year and the  
5 American Academy of Pediatrics recommends that newborn infants be screened prior to  
6 discharge from the hospital; and  
7  
8 Whereas, RRT is simple and inexpensive, it only evaluates approximately 6.5 percent of the  
9 retina (i.e., the optic disc and posterior pole) and leaves 95 percent of the retina unexamined;  
10 and  
11  
12 Whereas, four prospective studies of RRT versus fundus imaging via Fundus Camera have  
13 demonstrated sensitivity of RRT to be 0-10 percent; and  
14  
15 Whereas, camera based photographic screening for Retinopathy of Prematurity has been  
16 studied and found effective in telemedicine examinations for Retinopathy of Prematurity; and  
17  
18 Whereas, wide-angle camera imaging covers 181 degrees of retina (six field, wide angle  
19 imaging per eye) and RRT covers approximately five degrees of retina; and  
20  
21 Whereas, twenty papers have been published throughout the world that have shown that wide  
22 angle imaging studies performed within 72 hours of birth are much more sensitive and specific  
23 than RRT in detecting retinal/macular hemorrhages; and  
24  
25 Whereas, multiple studies have been performed with wide-angle fundus imaging and have  
26 revealed that approximately 4.5 – 8 percent of all newborn eyes studied had some form of  
27 referral warranted abnormality including, foveal hemorrhages, retinoblastoma, optic nerve  
28 abnormalities, retinal detachments, cataract, developmental abnormalities, inherited retinal  
29 dystrophies and infectious chorioretinitis; and  
30  
31 Whereas, the yield of positive results for referral warranted newborn eye screening (4.5-8  
32 percent) is greater than newborn screening for hearing deficits (1.6/1000 or 0.16 percent of live  
33 births; and  
34  
35 Whereas, the Universal Photographic Newborn Eye Screening (U.N.E.S.) workflow consent  
36 protocol requires pharmacologic dilation, nursing and or technician photographers, six field,  
37 wide-angle imaging per eye, image interpretation and decision for follow up (U.N.E.S.  
38 taskforce); and

1 Whereas, the safety summary data has been published and shows “No ocular or systemic  
2 complications during or after eye examination;” therefore be it

3  
4 RESOLVED, that our American Medical Association amend AMA policy, Standardization of  
5 Newborn Screening Programs H-245.973 by addition and deletion as follows:  
6

7 Our AMA: (1) recognizes the need for uniform minimum newborn screening (NBS)  
8 recommendations; (2) encourages continued research and discussions on the potential benefits  
9 and harms of NBS for certain diseases; and (3) supports screening for critical congenital heart  
10 defects for newborns following delivery prior to hospital discharge; and (4) endorses Universal  
11 Photographic Newborn Screening as a national practice for newborn children. (Modify Current  
12 HOD Policy)

Fiscal Note: Minimal - less than \$1,000

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#### REFERENCES

1. Azad et al. -2021- The Utility of Universal Newborn Eye Screening- A Review Ophthalmic Surg Lasers Imaging Retina 2021;52:56-516:p56
2. Callaway NF, Ludwig CA, Blumenkranz MS, Jones JM, Fredrick DR, Moshfeghi DM. Retinal and Optic Nerve Hemorrhages in the Newborn Infant: One-Year Results of the Newborn Eye Screen Test Study. Ophthalmology. 2016 May;123(5):1043-52. doi: 10.1016/j.ophtha.2016.01.004. Epub 2016 Feb 11. PMID: 26875004; PMCID: PMC4918466. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4918466/>
3. Capone A Jr, Drenser KA. Teleophthalmology for the Newborn Eye: Telemedicine for an Overlooked Patient Population. Ophthalmic Surg Lasers Imaging Retina. 2021 Dec;52(S2):S4-S5. doi: 10.3928/23258160-20211115-01. Epub 2021 Dec 1. PMID: 34908493. <https://pubmed.ncbi.nlm.nih.gov/34908493/>
4. Tang H, Li N, Zhang M, Wei M, Huang C, Wang J, Li F, Wang H, Liu Z, He L, Cheng Y, Chen W, Jin L, Gong L, Lu J, Xue Y, Su M, Wang Y, Mo H, Chen Z, Guo W, Li Y, Pan H, Zhang W, Ma X, Jin X, Wang B; collaborating group of neonatal ocular birth defects and genetic diseases in China. Fundus examination of 199 851 newborns by digital imaging in China: a multicentre cross-sectional study. Br J Ophthalmol. 2018 Dec;102(12):1742-1746. doi: 10.1136/bjophthalmol-2018-312366. Epub 2018 Aug 17. PMID: 30120130.
5. Goyal P, Padhi TR, Das T, Pradhan L, Sutar S, Butola S, Behera UC, Jain L, Jalali S. Outcome of universal newborn eye screening with wide-field digital retinal image acquisition system: a pilot study. Eye (Lond). 2018 Jan;32(1):67-73. doi: 10.1038/eye.2017.129. Epub 2017 Jul 24. PMID: 28737759; PMC5770699. <https://pubmed.ncbi.nlm.nih.gov/28737759/>
6. U.S. Preventive Services Task Force. Universal screening for hearing loss in newborns: US Preventive Services Task Force recommendation statement. Pediatrics. 2008;122(1):143-148. 7. Morton CC, Nance WE. Newborn hearing screening----a silent revolution. N Engl J Med. 2006;354(20):2151-2164.

#### RELEVANT AMA POLICY

##### Standardization of Newborn Screening Programs H-245.973

Our AMA: (1) recognizes the need for uniform minimum newborn screening (NBS) recommendations; (2) encourages continued research and discussions on the potential benefits and harms of NBS for certain diseases; and (3) supports screening for critical congenital heart defects for newborns following delivery prior to hospital discharge.