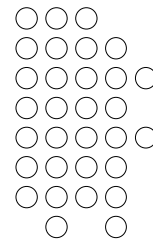


Global Screening of Hearing in Newborns. Update from Portugal

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Global Screening of Hearing

Universal Newborn Hearing Screening

- Means: at least 95% of **all newborns** are successfully screened, through all the stages, until a definite diagnosis can be achieved*
(Only 5% of the children *may be* lost)

* Task Force on Newborn and Infant Hearing Guidelines

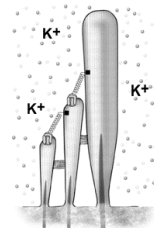


Improving the rate of missed to follow-up children

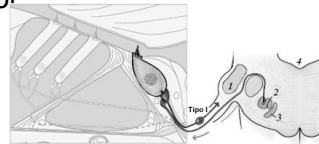


A strategy for minimizing the rate of “false positive” results should be used:

1. Choosing the more appropriate equipment (OAE vs ABR) for each screening model to improve sensitivity and specificity.
2. Provide formal and periodic training for the involved professionals
3. Work as a team, committed to a mission (motivation of the professionals)

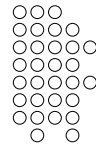


OAE



ABR

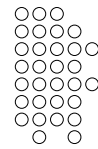
Improving the rate of missed to follow-up children



- Screening is more effective when the child is at the maternity
- Children who “fail” the first stage should be referred to a second stage within a short period of time, so the parents are still motivated to bring the child back to the hospital

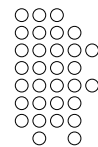


Improving the rate of missed to follow-up children



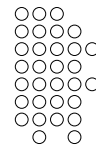
- Improving the demographic data registers (correct address, one or two phone numbers), so the child can be easily found after discharged
- Perform periodic audits, so someone from the team (a clerical staff member?) can track the family of the missed to follow-up child

Improving the rate of missed to follow-up children



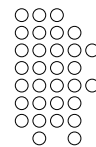
- Provide simple and clear information to the parents about the importance of early diagnosis and intervention (patient information handouts)
- Allow easy access of the parents to someone responsible for the screening (clearly identified in the written information)

Improving the rate of missed to follow-up children



- Special groups of families should be identified (immigrants, minorities), so an appropriate language must be used by the professionals involved, should a second screening stage or a diagnostic test be needed

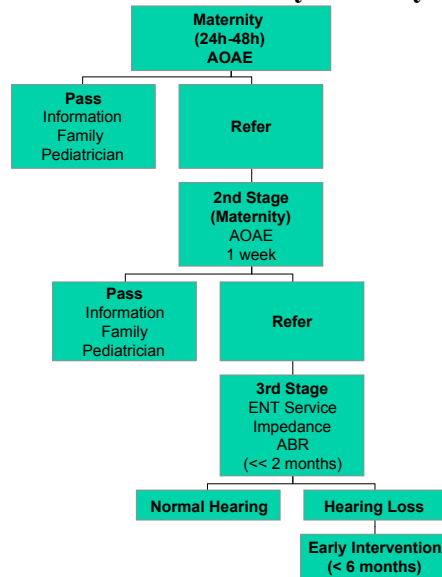
Improving the rate of missed to follow-up children



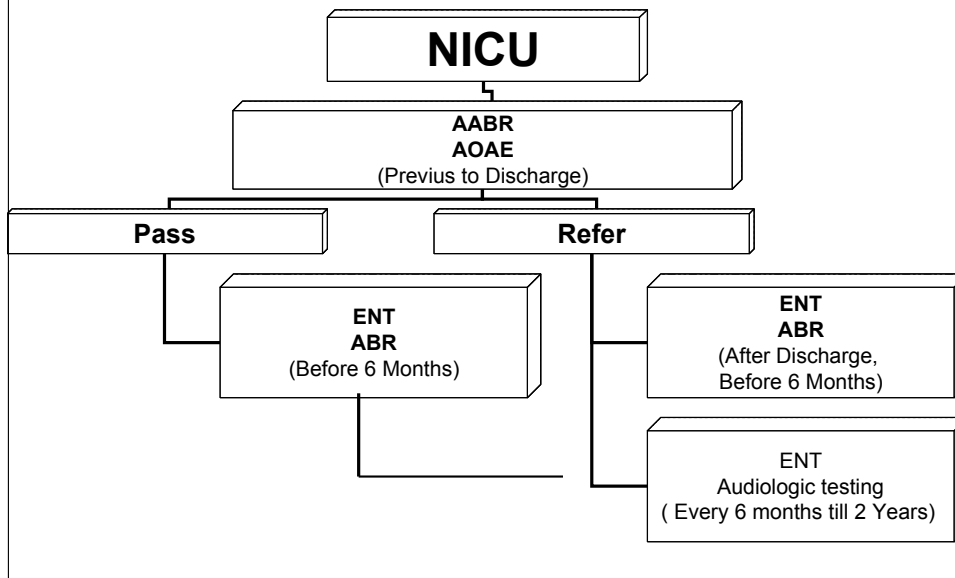
- Hospital Dona Estefânia has a Universal Screening program since the maternity ward reopened in May 2002
- Automatic OAE based screening started at the maternity



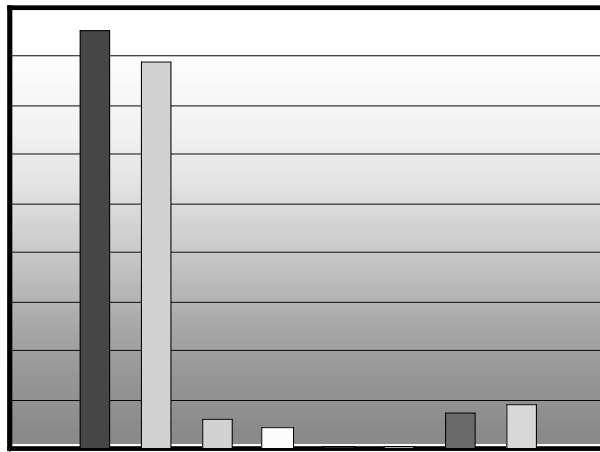
H. Dona Estefânia UNHS-Well-baby Nursery



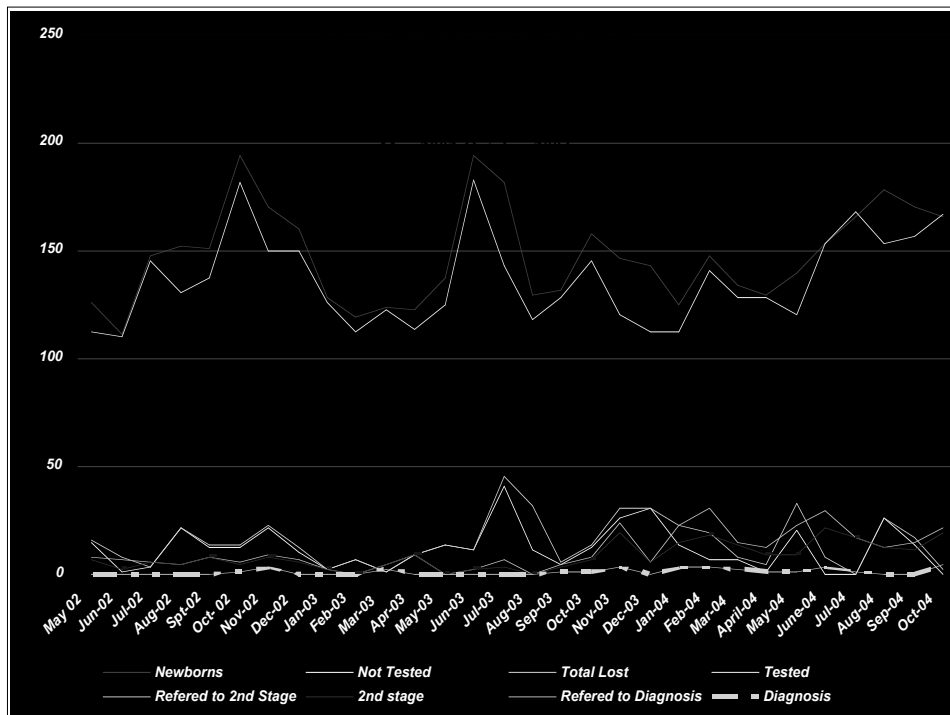
H Estefânia - High Risk Babies (Target) Screening (Started September 2004)



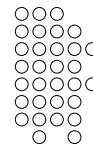
Universal Screening Well-Baby Nursery May 2002-October 2004



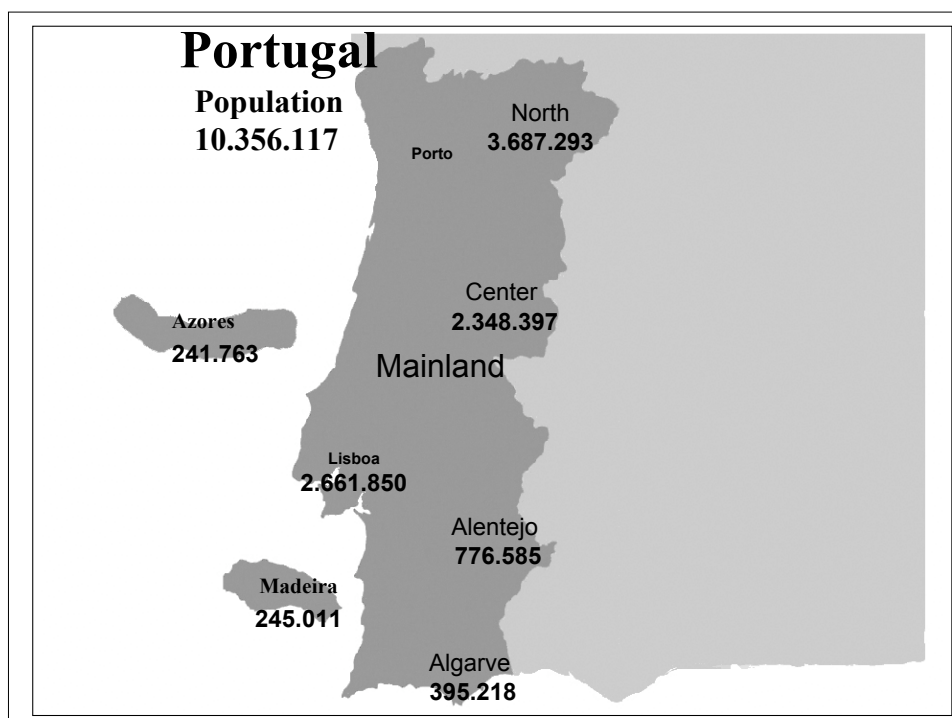
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Present Situation in Portugal

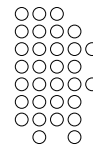


- In Portugal, universal screening is not mandatory, nor common
- Target Screening (high risk register) is a rule
- A “Task Force” is designated to implement Universal Newborn Hearing Screening



	Inhabitants	Audiology Technicians	Newborns 2002	Technicians / 1000 Newborns
Portugal	10.356.117	68	<u>114 456</u>	0,59
Mainland	9.869.343	63	108 273	0,58
North	3.687.293	21	41 667	0,50
Center	2.348.397	11	16 951	0,64
Lisboa	2.661.850	28	40 546	0,69
Alentejo	776.585	0	4 543	0
Algarve	395.218	3	4 543	0,66
Azores Islands	241.763	3	3 064	0,97
Madeira Island	245.011	2	3 117	0,64

	Newborns Submitted to Universal Screening	Number of Audiology Technicians	Nº Technicians/ 1000 Newborns	TOTAL Newborns (2002)
Portugal	<u>14 624</u> <u>12,77%</u>	68	0,59	114 456
Mainland	9 830 9,08%	63	0,58	108 273
North	0	21	0,50	41 667
Center	0	11	0,64	16 951
Lisboa	7 000 17,3%	28	0,69	40 546
Alentejo	0	0	0	4 543
Algarve	2 830 62,3%	3	0,66	4 543
Azores Islands	1 924 62,8%	3	0,97	3 064
Madeira Island	2 870 92,1%	2	0,64	3 117



- We wish to thank the Ronald McDonald Foundation for the donation of the screening and diagnostic equipment that made possible the Newborn Hearing Screening at H. Dona Estefânia Hospital