Recommandations OMS pour les soins ophtalmologiques

Télémédecine = solution des régions sous-dotées ? Solution de délégation sous contrôle ?

PY ROBERT

C CHIQUET

INTERNATIONAL STANDARDS FOR VISION REHABILITATION: REPORT OF THE INTERNATIONAL CONSENSUS CONFERENCE

Rome, 9-12 December 2015

- Soins primaires, secondaires, tertiaires
- What, Who, How, Where
- Critères de professionnalisme :
  - « Standard » (Need to have). Critères minimum
  - « Plus » (Nice to have). Critères optimum.

Conférence de consensus Rome 2015: Soins primaires « standard »

STANDARD

PRIMARY			
WHAT (Services)	**HOW (Equipment)**	**WHO (Workforce)**	**WHERE (Place where services are provided)**
ASSESSMENT			
Vision screening for adults and children including distance and near visual acuity and confrontation visual field assuring that eye care is available	Simplified visual acuity charts (distance and near, adult and pediatric), pen torch. The WHO Low Vision Kit can be used	Primary eye and health care workers, community workers, teachers, or others trained to measure visual acuity and confrontation visual field	Community and other settings that provide services such as primary health centres, CBR centres, maternal and child centres, eye and health centres, schools and community centres
Assessment of individual needs of adults' and children's goals and personal risks. Assessment of functional vision (how the individual uses their vision)	Functional vision assessment such as doing daily tasks that are important to the individual or using WHO Low Vision Kit	Primary eye and health care workers, community workers, teachers, or others trained to assess personal needs and environment	Community and other settings that provide services such as primary health centres, CBR centres, maternal and child centres, eye and health centres, schools and community centres
REHABILITATION			
Provision of non-optical devices, training in activities of daily living, basic mobility and modifications of the environment	Non-optical devices such as writing instruments, bold pens, activities of daily living equipment, reading stands, lamps, high contrast items, filters, increased contrast toys. Instruction such as sighted guide technique or basic protection technique	Primary eye and health care workers, community workers, teachers, or others with the capacity to provide basic rehabilitation methods for adults and children with visual impairment	Community and other settings that provide services such as primary health centres, CBR centres, maternal and child centres, eye and health centres, schools and community centres

Conférence de consensus Rome 2015 : Soins primaires « plus »

PRIMARY			
WHAT (Services)	**HOW (Equipment)**	**WHO (Workforce)**	**WHERE (Place where services are provided)**
ASSESSMENT			
Refraction, reading evaluation	Refraction equipment, reading tests	Ophthalmologists, optometrists, orthoptists, vision technicians, ophthalmic technologists or other personnel trained in refraction	Community and other settings that provide services such as primary health centres, CBR centres, maternal and child centres, eye and health centres, schools and community centres

Conférence de consensus Rome 2015: Soins secondaires « standard »

	SECONDARY			
	WHAT (Services)	**HOW (Equipment)**	**WHO (Workforce)**	**WHERE (Place where services are provided)**
	ASSESSMENT			
	Record individual history, goals, comorbidities, needs, living situation, etc.	Interview	Eye and health care workers, ophthalmic nurses, teachers, social workers, rehabilitation staff or others with knowledge of causes of vision loss and vision rehabilitation process	Settings such as schools, community settings, secondary eye and health centres, district hospitals and rehabilitation centres
STANDARD	Assessment of residual visual functions (visual acuity, contrast sensitivity, depth perception, color vision, light and dark adaptation, central/ peripheral visual field as indicated) and refraction. Discussion and education with patient and family. Repeated as necessary at follow up visits	List of vision assessment equipment, ophthalmic equipment	Eye care providers such as ophthalmologists, optometrists, ophthalmic clinical officers, ophthalmic technicians or orthoptists	Health settings providing a low vision rehabilitation service, schools, optometry clinics, orthoptic clinics, eye care or refraction centres, ophthalmology clinics, homes
	Assessment of functional vision and ability to carry out activities of daily living requiring vision (such as reading, writing or using a computer), assessment of vision for mobility	Assess use of vision by adults and children to complete a range of tasks such as reading, using a computer, ambulating, etc.	Eye health professionals, allied health professionals, rehabilitation specialists, orientation and mobility specialists, education specialists	Settings such as schools, community settings, secondary eye and health centres, district hospitals, homes and rehabilitation centres

PERSPECTIVES
Actes délégables en France :

- Soins primaires:
  - Mesure de l'acuité visuelle
  - Mesure de la réfraction
  - Champ visuel par confrontation
- Soins secondaires: Services, Hôpitaux de réadaptation
  - Réadaptation orthoptique
  - Prescription des aides optiques
- Soins tertiaires: Grands centres
  - ?

NOUVELLES TECHNOLOGIES ET DELEGATION DE TACHES

TELEMEDECINE la solution ?

- Télémédecine = utilisation d'informations électroniques et de communications pour réaliser des soins à distance
- Pour le screening ou une **visite OPH "classique"** (en urgence ou non)

AVANTAGES

- **Objectivité des images électroniques**
- Temps d'examen réduit ?
- **Accès aux régions dépourvues de médecins ++** (Canada, Australie, Espagne, Afrique)
- **Rapport coût / efficacité**

- Capacité de screening
- **Capacité d'examen général +++ ou ciblé (diabète, DMLA, rétine, glaucome, neuro OPH)**

EXAMEN GENERAL

- Remplace la CS tout venant habituelle
- **EN TEMPS RÉEL**
  - MG J Telemed Telecare: Blomndahi 2002 (Stockolm), Lamminen 1999 (Finland), Bar Sela 2007 / optométriste
- **EN DIFFERE** (cf M Muraine) Maa Telemed and eHealth 2014

- Cabines d'examen en cabinet / camion
- Plateforme numérique

USA

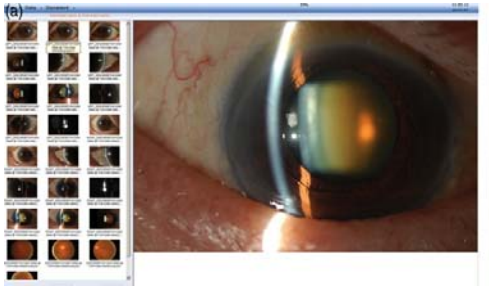
- Erreur réfractive 25-54% de la population entre 40-80 ans Coleman J Am Geriatr Soc 2006
- À partir du screening de la RD Chasan Jama Ophthamol 2014, Owsley Jama Ophthalmol 2016, Maa telemed and eHealth 2017 :
  - Nerf optique 30%
  - Cataracte 6-30%
  - DMLA 5-12%
  - 17% des patients avaient au moins 2 problèmes (incluant la RD parfois) Chasan Jama Ophthamol 2014
  - Au moins 50% des sujets avait un problème autre que la RD Owsley Jama Ophthalmol 2016

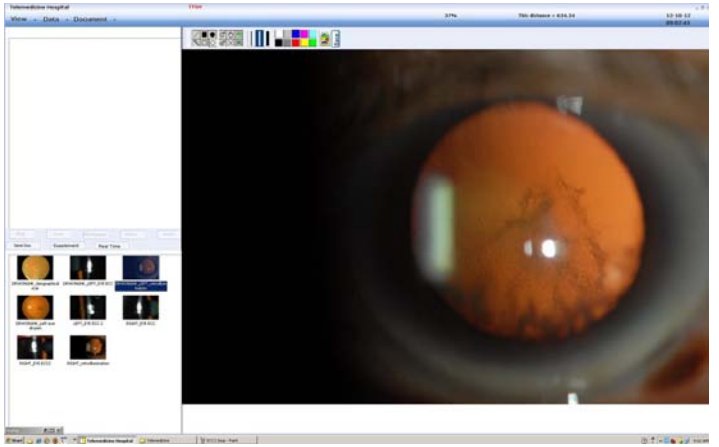
INDE

- UNITE MOBILE John Telemed e Health 2012 :
  - Erreur réfractive 60%
  - Cataracte 30%
  - Ptérygion 2,5%
  - Glaucome 0,8%
  - Rétine 3,3%
  - Cornée 1%

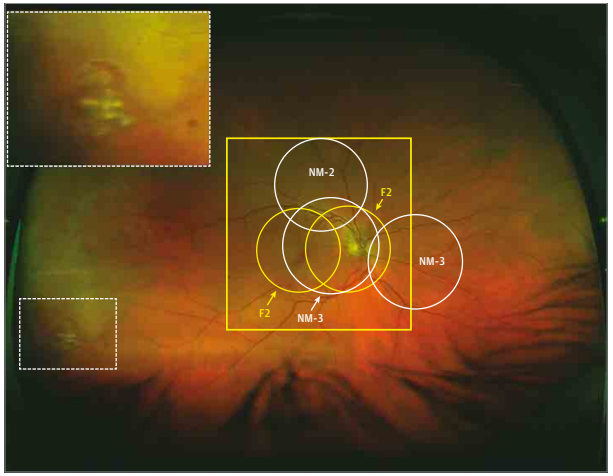
Examen du segment antérieur

- Autoréfraction + AV
- Photo du SA de face comprenant les paupières Maa Telemed and eHealth 2014
- À l'aide du rétinographe Owsley Jama Ophthalmol 2016
- Lampe à fente J Telemed Telecare: Blomndahi 2002 (Stockolm), Bar Sela 2007, Tan 2013
- Mobile phone application mHealth Sana platform





Examen du segment postérieur



- **Pupille dilatée** +++
- Rétinographe 45°
- **Rétinographie grand champ** +++ Silva Ophthalmology 2013, Silva JAMA Ophthalmol 2016: mieux pour le diabète,
- Limites de l'imagerie : étude du vitré

- **Screening +++** rétine (21% d'anomalies: DMLA 5%, MER 11%, DR 7%, glaucoma suspect 7%) Zapata Telemedecine and ehealth 2017 (Espagne) 15 euros
- (diabète, DMLA)

Étude médicoéconomique

Nécessite une analyse multifactorielle

COUT

- Investissement en matériel : teleHealth équipment optométriste > MG
- Coût camion ? (mobiles clinics)
- Plateforme informatique
- Examens non utilisables (2% FO)

RENTABILISATION

- Réduction des transports
- Nombre de patients minimum (cf études sur RD et urgences)
- Type de population étudiée
- Remboursement pour l'orthoptiste et le MG
- Taux d'adressage à l'OPH
- Augmentation du coût indirect par dépistage de patients ignorés dans le domaine du dépistage et pathologies associées Chasan Jama Ophthamol 2014 = 1000$/patient
- Qualité de vie, vue (Quality adjusted life year QALY) – seuil de 50 000 $/QALY
- Meilleur rendement si paiement à l'acte > salarié Turner Clin Exp ophtalmol 2011

Les besoins de la population

- Télémédecine = travail délégué en partie **avec lecture différée, sous contrôle médical à di**stance (M Muraine) **ou dans les cabinets existants** (JB Rottier)
- QUEL EST LE TEMPS MEDICAL ECONOMISÉ ?

TABLE 2 COMPREHENSIVE MEDICAL EYE EVALUATION FOR ADULTS WITH NO RISK FACTORS

Age (years)	Frequency of Evaluation
65 or older[149]	Every 1–2 years *(II++, moderate quality, strong recommendation)*
55–64	Every 1–3 years *(moderate quality, strong recommendation)*
40–54	Every 2–4 years *(moderate quality, strong recommendation)*
Under 40	5–10 years *(moderate quality, strong recommendation)*

Interim eye evaluations, consisting of vision examinations (e.g., refractions, eyeglasses, contact lens evaluations), may be performed during these periods as well.

PREFERRED PRACTICE PATTERN®

2016

TABLE 3 COMPREHENSIVE MEDICAL EYE EVALUATION FOR PATIENTS WITH DIABETES MELLITUS OR RISK FACTORS FOR GLAUCOMA

Condition/Risk Factor!	Frequency of Evaluation*!	
Diabetes Mellitus	**Recommended Time of First Examination**	**Recommended Follow-up***
Type 1[153]	5 years after onset** *(II++, moderate quality, strong recommendation)*	Yearly *(II++, moderate quality, strong recommendation)*
Type 2[154]	At time of diagnosis *(II++, moderate quality, strong recommendation)*	Yearly *(II++, moderate quality, strong recommendation)*
Prior to pregnancy[155-157] (Type 1 or 2)	Prior to conception and early in the first trimester *(I, high quality, strong recommendation)*	See Diabetic Retinopathy PPP[74] for interval recommendations based on findings at first examination *(I, high quality, strong recommendation)*
Risk Factors for Glaucoma[35,39,89,93,94,158]	**Frequency of Evaluation***	
Age 65 years or older	Every 1–2 years* *(moderate quality, strong recommendation)*	
Age 55–64 years	Every 1–2 years *(moderate quality, strong recommendation)*	
Age 40–54 years	Every 1–3 years *(moderate quality, strong recommendation)*	
Under 40 years	Every 1–2 years *(moderate quality, strong recommendation)*	

* The ophthalmologist's assessment of degree of risk, abnormal findings, or potential loss of visual function may dictate more frequent follow-up examinations than listed in this table. If the patient has additional glaucoma risk factors, the Primary Open-Angle Glaucoma Suspect PPP should be consulted.[159]

** Some patients may require refractive management during this period.