

PROGRAMME and ABSTRACTS

7th French-Chinese Symposium on Health Law and bioethics

E-health and aging: legal, ethical, social and medical aspects

Faculté de médecine 37 Allées Jules Guesde Salle Christina Vincent 9 October 2018



Organized by the INSERM Unit 1027 University Paul Sabatier and the UNESCO Chair : Ethics Science and society

in the framework of the XU Guangqi program Jointly sponsored by INSERM Unit 1027 and CAMPUS France



Affiliated to the 4ièmes Rencontres Franco-Chinoises du droit et de la Justice sponsored by the French Embassy in China

Coordinated by AM. Duguet and E. Rial-Sebbag (UMR/INSERM 1027) Yinliang Liu (PKU Law School) and Wu Tao (Xi'an Medical University)

In partnership with the Toulouse Gérontopôle, Pekin University Law School, L'Université Toulouse III Paul Sabatier, Le centre de droit des affaires de l'Université Toulouse Capitole, L'ARFDM : Association de recherche et de formation en droit médical, the Humanistic Medicine research Center of Shandong University and the Bioethics Research Institute of Shandong Province, L'HIRI : Health Industry Research Institute Shanghaï Jiaotong University, the Law School of Macau University.

4e Rencontres franco-chinoises du Droit et de la Justice 第四期中法法律与司法交流周

Paris - Pékin - Wuhan – Toulouse du 3 au 18 octobre 2018 巴黎 - 北京 - 武汉 - 图卢兹



Avec le soutien de l'Ambassade de France en Chine 法国驻华大使馆对此次活动给与支持

Préface de Nicole BELLOUBET Garde des Sceaux, Ministre de la justice



Je me suis rendue en Chine en juin dernier, dans le cadre de la visite effectuée par le Premier ministre Edouard Philippe. Ce déplacement a donné lieu à la signature avec FU Zhenghua, Ministre de la justice de la République populaire de Chine, d'un « arrangement administratif relatif aux échanges et à la coopération dans les domaines juridique et judiciaire », première étape du lancement d'un Dialogue politique en matière de Justice que nos chefs d'Etat ont conjointement appelé de leurs voeux en janvier dernier.

Afin de garantir l'impulsion et la cohérence nécessaires, le texte signé prévoit l'établissement d'une feuille de route commune fixant des priorités thématiques et un calendrier d'actions pour y répondre. Celui-ci s'appuiera sur les nombreuses coopérations développées depuis vingt ans entre les acteurs institutionnels et universitaires de nos deux pays, et dont le périmètre a encore été élargi en 2018, par la signature d'accords de coopération entre le Conseil supérieur du notariat ou le Conseil national des barreaux et leurs homologues respectifs en Chine.

Ce nouvel élan pourra également s'appuyer sur le succès grandissant des Rencontres Franco-Chinoises du Droit et de la Justice, lancées en 2017 à l'initiative du service juridique de l'ambassade de France. La 4ème édition de ces Rencontres, qui coïncide avec le 5ème Mois franco-chinois de l'environnement, consacre plusieurs actions à ce sujet majeur pour l'avenir de nos sociétés. Marqueur du renforcement significatif de nos échanges, d'autres thématiques continuent également à être abordées, telles que le droit de la santé, le vieillissement des populations, l'arbitrage international en matière commerciale, ou encore les questions soulevées par l'initiative des nouvelles routes de la soie.

A cet égard, je souhaite remercier l'ensemble des organisateurs, partenaires et participants qui prendront part à ces échanges qui s'annoncent passionnants et sont, à n'en pas douter, importants pour notre compréhension mutuelle.

4e Rencontres franco-chinoises du Droit et de la Justice 第四期中法法律与司法交流周

Paris - Pékin - Wuhan – Toulouse du 3 au 18 octobre 2018 巴黎 - 北京 - 武汉 - 图卢兹



Avec le soutien de l'Ambassade de France en Chine 法国驻华大使馆对此次活动给与支持

Préface de FU Zhenghua Ministre de la Justice de la République populaire de Chine



C'est une immense joie pour moi d'apprendre que les Rencontres franco-chinoises du droit et de la justice ont lieu simultanément dans nos deux pays. Au nom du Ministère de la Justice, je félicite chaleureusement la tenue de ces événements majeurs. Ces dernières années, les partenariats stratégiques sino-français ont connu un développement stable et atteint un niveau exceptionnel. Ces derniers fonctionnent dans un esprit pragmatique et produisent d'ores et déjà des résultats fructueux dans une large palette de secteurs.

Lors de sa visite officielle en Chine en janvier 2018, le Président Macron et le Président Xi Jinping ont échangé, en toute sincérité et efficacité, sur les relations bilatérales et les enjeux auxquels sont confrontés nos deux pays. Leur rencontre a ouvert de nouvelles perspectives pour nos relations, y injectant un nouveau souffle et consolidant la confiance réciproque dans les domaines politiques et stratégiques. Dans la déclaration conjointe, les deux pays soulignent leur détermination à « renforcer les échanges et la coopération dans les domaines juridique et judiciaire » et à « établir un mécanisme de dialogue en la matière».

Les échanges et coopérations entre nos pays dans les domaines juridique et judiciaire constituent une partie intégrante de l'amitié sino-française. Il s'agit à la fois d'un élargissement de nos relations bilatérales et d'une sécurité juridique pour le bon développement de ces dernières. Ces échanges permettent aux juristes français et chinois de mieux se connaître, se comprendre et d'approfondir la coopération. Nos deux pays ont déjà signé un « Accord d'entraide judiciaire en matière civile et commerciale », un « Accord d'entraide judiciaire en matière pénale » et un «Traité d'extradition ». A l'appui de ces textes, des actions communes ont pu être menées et dans l'ensemble elles se sont passées dans de bonnes conditions. A cette occasion, les partenaires chinois tiennent à remercier l'aide que nos collègues français ont fournie en matière d'extradition et d'entraide judiciaire pénale.

Dans un esprit de concrétisation du consensus obtenu entre les deux Présidents en janvier 2018, les deux ministères de la justice ont signé au mois de juin un «Arrangement administratif relatif aux échanges et à la coopération dans les domaines juridique et judiciaire », lançant le "Dialogue bilatéral franco-chinois en matière de droit et justice" et consolidant à nouveau la base d'enrichissements mutuels et de coopérations pragmatiques dans ces domaines, avec toujours un principe de respect et de confiance réciproques.

Je suis fermement convaincu que ces échanges et coopérations répondent aux désirs partagés de nos gouvernements respectifs, de nos juristes et de nos peuples et qu'ils vont jouer un rôle fondamental dans le développement de nos amitiés. Grâce à cette extraordinaire plateforme que constituent les "Dialogues bilatéral franco-chinois en matière de droit et justice", nous allons améliorer les connaissances et compréhensions réciproques, approfondir les coopérations concrètes et échanger davantage sur les pratiques et outils de travail, portant ainsi de nouvelles contributions à l'amitié sino française et au progrès du droit dans nos deux pays.

Je souhaite un franc succès à la 4ème édition des Rencontres Franco-Chinoises du Droit et de la Justice.

4e Rencontres franco-chinoises du Droit et de la Justice 第四期中法法律与司法交流周

Les **Rencontres Franco-Chinoises du Droit et de la Justice** s'inscrivent dans une dynamique de renforcement la coopération juridique avec la Chine ; elles ont pour ambition de constituer une plateforme bilatérale de coopération qui permette de mieux :

- fédérer l'ensemble des acteurs juridiques et judiciaires
- dialoguer autour de thématiques prioritaires,
- mettre en évidence et suivre les évolutions du contexte chinois,
- assurer au droit français une plus grande visibilité et influence en ces matières.

Lancées en 2017, 3 éditions ont déjà été organisées :

- 1^{ère} édition (Pékin, Shanghai, 19-23 juin 2017): « réforme et codification du droit civil ».
- 2^e édition (Pékin, 12-13 octobre 2017) : « mutations urbaines et environnement : quel droit pour la ville du 21^{ème} siècle ? ».
- 3^e édition (Paris-Pékin-Shanghai-Suzhou, 13-21 mai 2018) : marquée par un élargissement partenarial et thématique, la dernière édition des RFCDJ a mobilisé dix-sept partenaires français et chinois et réuni environ 500 juristes et praticiens du droit autour de différents sujets : la réforme du droit civil, l'attractivité économique du droit, enjeux juridiques du vieillissement, hiérarchie des normes...

La 4^{ème} édition des *Rencontres Franco-Chinoises du Droit et de la Justice* (3 - 18 octobre 2018) comprendra 12 actions.

Outre l'environnement et la santé (thématique du 5è Mois Franco-Chinois de l'Environnement), les 4èmes RFCDJ aborderont par ailleurs d'autres thématiques (vieillissement, contentieux administratif, arbitrage commercial, BRI) :

- 7^{ème} Symposium Franco-Chinois « *Droit de la santé et bioéthique* » (Toulouse, 9 octobre, organisé par L'unité INSERM 1027, l'Université Paul Sabatier et le Gérontopôle de Toulouse)
- Réunion du groupe de travail franco-chinois informel « Agriculture de demain et sécurité sanitaire » (Pékin, 10 octobre)
- Regards croisés franco-chinois « Respirer, boire, manger : quel droit pour un environnement sain ? » (Pékin, 11-12 octobre, université de droit et de sciences politiques, china law society, fondation pour le droit continental)
- Atelier d'échanges « l'entreprise face à la norme environnementale et sanitaire en RPC : retour d'expérience » (Pékin, 13 octobre, CCIFC)
- Colloque franco-chinois sur le droit de l'environnement (Wuhan, 14 octobre, CG avisé et associé)
- 10è séminaire annuel entre l'Ecole nationale de la magistrature et le Collège national des procureurs de RPC (Pékin, 15-16 octobre)
- Conférence «*Les enjeux juridiques de la Belt and Road Initiative* » (Paris, 3 octobre, organisé par l'Association Franco-chinoise de droit économique)
- Séminaire international Chine-France « *Réflexions partagées sur le vieillissement* » (Pékin, 10 octobre, organisé par université de droit et de sciences politiques & université Paris 8)
- 7e colloque sino-français en droit administratif « *Vers un droit administratif effectif* » (Pékin, université de droit et de sciences politiques & Conseil d'Etat, 16 octobre)
- Conférence « *Les enjeux du droit continental au regard du nouveau positionnement de la Chine »* (Paris, 16 octobre, organisé par le Conseil national des barreaux)
- Atelier franco-chinois : l'expert dans les procédures d'arbitrage commercial international (Pékin, 18 octobre, Beijing arbitration commission & cabinet Acurracy)

Présentation du 7iéme Symposium Franco-Chinois de droit de la santé et bioéthique de Toulouse

E-Health and Aging : Legal, ethical, social and medical aspects.

Depuis plus de 10 ans, une coopération universitaire entre la France et la Chine s'est établie dans le domaine du droit de la santé et de la Bioéthique. Le Symposium Franco-chinois est l'occasion de réunir des spécialistes Français et Chinois afin de conduire une réflexion comparée. Dans les deux pays existe une volonté de promouvoir le droit de la santé et la bioéthique sur le plan de la recherche et de la formation. Les liens se sont resserrés avec nos collègues Chinois au travers de rencontres internationales et surtout de projets de coopération (programmes Cai Yuanpei et Xu Guangqi) soutenus par l'Ambassade de France en Chine et Campus France depuis 2012.

Un réseau multidisciplinaire Franco-Chinois s'est constitué associant des spécialistes du droit et de la santé, Chinois et Français, ainsi que des jeunes chercheurs et des doctorants. Ils se rencontrent à l'occasion d'ateliers ou de Symposiums soit en France soit en Chine et publient régulièrement des travaux scientifiques.

Le 7iéme Symposium E-Health and Aging s'inscrit dans le cadre d'un projet Xu Guangqi entre l'UMR/INSERM 1027 de l'Université Paul Sabatier de Toulouse et la Law School de Pekin University. Le vieillissement est une préoccupation de santé publique partout dans le monde. A cet égard, le Gérontopôle de Toulouse partenaire du Symposium, dispose d'une expertise internationalement reconnue. Le 21 mai2018 s'est tenu à Shanghaï, pendant les 3ièmes rencontres Franco-Chinoises du droit et de la Justice, un colloque sur Vieillissement et Politiques de santé Publique auquel l'Université Paul Sabatier a participé et a souhaité apporter une suite avec le 7^{ième} Symposium.

Après une introduction sur le vieillissement et des politiques conduites en France et en Chine, les orateurs présenteront les applications électroniques pour le diagnostic et le suivi en gérontologie, les techniques de surveillance des personnes âgées et de télémédecine et l'utilisation des objets connectés ainsi que collecte et l'utilisation des données. Les discussions permettront d'échanger sur les aspects légaux, éthiques et sociaux.

AM. Duguet E. Rial-Sebbag UMR INSERM 1027 Université Paul Sabatier

Presentation of the Toulouse 7th Franco-Chinese Symposium on Health Law and Bioethics

E-Health and Aging: Legal, Ethical, Social and Medical Aspects.

For more than 10 years, an academic cooperation between France and China has been established in the field of health law and bioethics. The Franco-Chinese Symposium is an opportunity to bring together French and Chinese specialists to lead a comparative reflection. In both countries there is a desire to promote health law and bioethics in terms of research and training. Links have been strengthened with our Chinese colleagues through international meetings and especially cooperation projects (Cai Yuanpei and Xu Guangqi programs) supported by the French Embassy in China and Campus France since 2012.

A French-Chinese multidisciplinary network has been formed, bringing together Chinese and French law and health specialists as well as young researchers and PhD students. They meet for workshops or Symposiums either in France or in China and regularly publish scientific works.

The 7th E-Health and Aging Symposium is part of a Xu Guangqi project between UMR / INSERM 1027 at Paul Sabatier University in Toulouse and the Law School at Pekin University. Aging is a public health concern all over the world. In this respect, the Gérontopôle of Toulouse, partner of the Symposium, has an internationally recognized expertise. On 21 May 2018, during the 3rd Franco-Chinese meetings of Law and Justice, a symposium on Aging and Public Health Policies was held in Shanghai at which Paul Sabatier University took part and wished to continue the reflection with the 7th Symposium.

After an introduction on aging and policies in France and China, speakers will present electronic applications for diagnosis and monitoring in gerontology, assistive techniques for the elderly and telemedicine and the use of connected objects as well as collection and use of data. Discussions will be focused on legal, ethical and social aspects.

AM. Duguet E. Rial-Sebbag UMR INSERM 1027 Université Paul Sabatier

Programme

8h30-Opening session Pr Chen Ziaoyang, Pr WuTao, Chen Xin, Pr Shu Defeng, Emmanuelle Rial, Anne-Marie Dauguet

Welcome from the UNESCO Chair Ethics Science and Society Emmanuelle Rial

Session 1: aging and aging policies in France and in China

Chair persons : Pr Wu Tao , Pr Bettina Couderc

9h Steps to healthy aging (WHO report on aging)
Pr Fati Nourhashemi Toulouse Gérontopôle
9h20 Physical exercice and aging Philippe De Souto Baretto Toulouse Gérontopôle
9h40 The challenges of China's aging problem from the legal perspective Pr Wu Tao Xi'an Medical University, Pr Chen Xiaoyang Humanistic Medicine research center of Shandong University
10h Coping with aging society: integration of health care and aged service based

10h Coping with aging society: integration of health care and aged service based in Shandong province Pr Shu De Feng President Shandong Medical college. 10h20 h Aging in elderly care homes in Shanghaï

Chen Xin Vice President of IHRI Jiao Tong University

10h 40 Coffee break

Session 2: Aging and electronic assistance and telemedicine

Chair persons : Pr Jacques Larrieu, Pr Fati Nourhashemi

11h Cognitive stimulation: Group entertainment with a multimedia tool Pierre Rumeau et Elisabeth Bougeois Laboratoire de geronto-technologie , Gérontopôle

11H40 Aging and Telemedicine in France : Law and practice Gauthier Chassang UMR/INSERM 1027

12h The achievements and challenges for telehealth in China from industrial and legal perspectives Shufeng Zheng PhD candidate, School of Law, Peking University

12h30- 14h Lunch (Restaurant le Moai Jardin des plantes)

Session 3 : Electronic applications for diagnosis and follow up

Chair persons : Pr Bruno Vellas ,Dr Chen Xin

14h Designing a Digital Environment for Frailty Screening, Evaluation and Monitoring Katarzina Borgiel Ecole en informatique et systèmes d'information pour la santé ISIS

14h20 Telegrafik smart care software plateform : an innovative solution for elderly people Deborah Parès Telegrafik

15h E-health solutions to sustain integrated care models for elderly people Emmanuel Sicard MHComm society

15h20 Connected objects and robots : the grail for the elderly Bettina Couderc UMR/INSERM 1027

15h40 Coffee break

Session 4: Elderly, connected objects and data protection

Chair persons : Emmanuelle Rial, Pr Shu Defeng

16h Understanding the needs for connected objects and the seniors: a classification based on acceptation levels. Julien Duguet UMR/INSERM 1027 16h20 Legal protection of e-health data

Huili Xu PhD candidate, School of Law, Peking University

16h40 Data protection: the example of elderly and profiling

Christophe Dejean-Ozanne Université Toulouse1 Capitole

17h Ethics in Assisted technologies for elderly people: Balance of interests of the elderly and their caregivers

Anne-Marie Duguet UMR/INSERM 1027

Site web : <u>www.arfdm.asso.fr</u>

Abstracts

The elderly home-based care mode in China and its social and cultural foundation

Pr Xiaoyang Chen

Humanistic Medicine Research Center, Shandong University

At present, China's aging population will continue to develop rapidly, and intertwine with the new normal economic development and social transformation. Expenditures on the elderly care, public health, welfare and other aspects of the whole society will continue to grow¹, and the task of coping with the aging population will be very arduous.

The construction goal of China's elderly care service system is based on home and community, supplemented by institution and integrated with medical care. Home-based care, as an effective way to cope with the aggravation of aging, guarantee and improve the quality of life of the elderly, refers to an elderly care mode in which the elderly can stay at home and receive services from the government, society, community and institutions, including life care, rehabilitation care, spiritual comfort and other services².

Elderly home-based care is the best choice in China under the condition of "getting old before getting rich", backwardness of the construction in social security system, and the overall low level of social security. The reasons are as follows: Firstly, home-based care is local care, which respects the living habits and social environment of the elderly³. Secondly, home-based care can better meet the needs of the terminal elderly, who want to live at home and accept the filial piety, material and spiritual support⁴. Thirdly, home-based care is still the first choice for the majority of the elderly, who believe that home-based care is more convenient and free⁵. Last but not least, home-based care is a traditional way of care that China is proud of, which is a concentrated reflection of filial piety culture. Home-based care satisfies the family's requirement, and family members can provide kinship care and fulfil the duty of support⁶.

Of course, we should also pay attention to the objective trend of the family miniaturization and weakening of family functions in China. It is far from enough to emphasize the importance of family support for the aged. We must focus on formulating and implementing policies for the home-based care. We should further maintain family support functions through policies. Meanwhile, we should actively develop community-based care and institution-based care for the aged⁷.

References

[1] 工业和信息化部,民政部,国家卫生计生委(Ministry of industry and information technology, Ministry of Civil Affairs, National Health and Family Planning Commission),智慧 健康养老产业发展行动计划2017-2020 (Smart Health Pension Industry Development National Action Plan 2017-2020), <u>http://www.gov.cn/xinwen/2017-02/20/content_5169385.htm#1</u>, Official website of the State Council of China (last connection the 27-8-2018).
[2] 国务院(The State Council of China), "十三五"国家老龄事业发展和养老体系建设规划 ("13th Five-Year" National Plan for the Development of Pension System 2017),

http://www.gov.cn/zhengce/content/2017-03/06/content_5173930.htm, Official website of the

State Council of China (last connection the 27-8-2018).

[3] 李勇(Li Y.)(2018), "医养结合"视角下社区居家养老服务的现状及对策(Community home care services in the view of "Combination of medical and medical care" Current situation and Countermeasures), 临床医药文献杂志(Journal of clinical medical literature), 5(8): 193-194.
[4] 陈宁(Chen N.)(2018), 从"生存"到"尊重": 我国居家养老服务理念的嬗变 (From "survival" to "respect", Evolution of the concept of home care service for the aged), 南华大学 学报(社会科学版) (Journal of Nanhua University (Social Science Edition)), 19(2): 58-62.
[5] 郝亚亚,毕红霞(Hao YY., Bi H,)(2017),农村空巢老人社区居家养老选择意愿分析——

基于山东省的问卷调查 (Analysis of rural elderly's choice of home care in community -- Based on the questionnaire survey of Shandong Province), 调研世界 (The World of Survey and Research), (8): 23-31.

[6] 王振波,吴湘玲(Wang Z., Wu X.,)(2017),城市社区居家养老服务模式研究——以武汉市为例 (Research on the mode of home care service in urban communities--Take Wuhan as an example),理论月刊(Theory Monthly), (10): 147-152.

[7] 吴玉韶(Wu. Y.)(2018), 对新时代居家养老的再认识(Reconsideration of home care in the new era), 中国社会工作(China Social Work), (2): 6-9.

The challenge of China's aging problem from the legal perspective

Tao WU*, Chen Xiaoyang**

* Xi'an Medical University (China)

**Humanistic Medicine Research Center of Shandong University (China)

By the end of 2017, there are 241 million people, or 17.3% of the total population, were aged 60 and over in China. It is estimated in 2040, the elderly population in China will reach 400 million, which will exceed 30% of the total population^[1].

Correspondingly, the development of medical service capability cannot meet the health needs of the elderly. For example, there is a serious shortage of medical institutions that can really set up beds according to geriatric requirements and fulfill geriatric roles. Except for the newly established Department of geriatrics in few medical schools such as Capital Medical University in Beijing, most Chinese medical schools do not have a department of geriatrics. The survey shows that in 2015, only 254 students enrolled in geriatrics who should be geriatric after 3 years^[2].

In addition, from a legal point of view, the Chinese authorities have not yet put geriatrics into the doctor's order system, that is, there are now no geriatric specialists officially in China. Therefore, while the development of medical specialty is insufficient, a series of legislative work to face the challenge of aging needs to be strengthened also.

The Chinese Law on the Protection of the Rights and Interests of the Elderly promulgated in 1996 clearly emphasizes the obligations of family support and social security, so that the rights and interests of the elderly can be guaranteed at the legal level.

A maintenance obligation was imposed by Article 14 of the Law.

Seniors can firstly ask a public structure to require their child to visit them(this structure does not have the power to punish, but it acts as an intermediary of negotiation). If that does not work, seniors can then sue their child in court. The court often obliges children to take responsibility for their parents' visit and / or imposes a financial penalty. In fact, the court negotiates between the two parties to protect the peace in the family. Moreover, the sanction of the court is often quite light. To protect their reputation, children respect the court decision and take responsibility.

For the Chinese, filial piety is considered as the most important virtue among Chinese traditional values. Also, children prefer to stop the procedure when negotiating in court. A sanction, however slight, would be quite negative and unbearable in life for the majority of Chinese.

It should be emphasized that in the process of revising the law, the traditional culture of the Chinese nation has also been embodied in specific laws and regulations. For example, Article 18 of the Law stipulates that: *"Family members shall be concerned about the spiritual needs of the elderly and shall not neglect or neglect them. Family members who live separately from the elderly should visit or greet the elderly frequently."*^[3] The formulation of the law has distinct characteristics of Chinese traditional culture.

However, the urgency of legislation is still reflected in the actual medical service process. In China, the number of elderly people who have lost their ability to live independently is about 80.6 million, but the total number of old-age beds in the country is only 7.3 million, including beds for autonomous people^[4]. As a result, home care services will have to grow considerably. In parallel, the legal status of home-based doctors is not yet regulated by regulations. In addition, home care is not yet organized and fees are not covered and reimbursed by Chinese Health Insurance.

Finally, because of the implementation of the one-child policy, the tradition of caring for elderly people at home by family could no longer work for the majority of Chinese families(1 couple for 4 parents). Therefore, private investment in the elderly care market will be a complementary means to combat the shortage of family and public resources. Therefore, in order to better benefit and protect these resources, there is a need to develop and regulate the legal participation of investment in this market.

In conclusion, in dealing with the aging population, it is not only the medical and health problems to be solved, but also the legal issues are urgent and important. All these can be summed up and used by me on the basis of fully considering China's national conditions and actively introducing foreign advanced experience.

References

[1]我国60岁及以上老年人口数量达2.41亿,占总人口17.3% (In China, the number of elderly people aged 60 or above reached 241 million, accounting for 17.3% of the total population in 2017), <u>http://www.gov.cn/xinwen/2018-02/26/content_5268992.htm.</u> official website of the Chinese Central Government (last connection at the 09/08/2018)

[2]褚明,等(Chu M., etc.)(2017). 中国老年医学硕士研究生教育的现状及对策(Education of Master Degree in Geriatrics in China). 南京医科大学学报 社会科学版(Journal of Nanjing Medical University Social Sciences). No.1:70-72

[3]中华人民共和国老年人权益保障法(Law of the Elderly Rights Protection) (China), <u>http://www.cncaprc.gov.cn/contents/12/174717.html</u>,official website of the National Commission on Care for the Elderly (last connection at the 09/08/2018)

[4] 吴玉韶,等(Wu Y, etc.)(2015). 中国养老机构发展研究(Research on the development of Chinese pension institutions). 老龄科学研究(Scientific Research on Aging). No.8(3):13-24

Aging in elderly care homes in Shanghaï Chen Xin Vice President of IHRI Jiao Tong University

China is being the largest and fastest aging country in the history of the world. Chinese government pays great attention to the development of city nursing houses and continuously increases its support.

The ageing affairs have been the focus of central government social strategy, also the local governments support the policy of the ageing affairs.

In Shanghai, the government has promulgated the official project: "Shanghai's Aging planning under The Twelfth Five-Year Developmental project" and "Several Opinions on Promoting the Construction of the Aged Care Organization during the Twelfth Five-Year Plan Period of the City", these files are aimed to guide and promote the development of the aging affairs.

At the same time, the aging of Shanghai has reached the level of developed countries in the world: in January 2018, Shanghai has a population of 4.83 million people that have the age over 60 years old, accounting for 33,2% of the total population. The life expectancy of the population in Shanghai in January 2018 is 83.37 years old, including 80.98 years for men and 85.85 years for women.

The HIRI of Shanghai Jiao Tong University, by the cooperation with Shanghai health and medical institutions, did the research project of survey on the equipment and satisfaction of 500 public and private nursing houses in Shanghai Center, for understanding the current status of the operation of the nursing houses in Shanghai. The research establish the index of equipment, environment, staff human resources, internal management, service level etc, to compare with the satisfaction of aging people in order to improve the output of the comprehensive service quality of Shanghai nursing houses.

Based on the research data, this project will give suggestions on the operation of the Shanghai Center Nursing houses, so as to further promote the development of Shanghai's aging affairs.

Cognitive stimulation: Group entertainment with a multimedia tool

P. Rumeau¹, F. Vella², N. Vigouroux² and True Life Lab researchers' association

1- UMR1027 Inserm-UPS / Gérontopôle / Pôle Gériatrie du CHU Toulouse 2- IRIT CNRS

Isolation is a major issue with rural elderly people. MARPA are homes for retired rural people. But as adapted as they are to that population, joining them requires abandoning one's home and oftentimes social connections. On the other hand social connections proved to be a prevention factor against frailty and handicap.

We tried to assess in 4 MARPA if a three month program of weekly group sessions with a facilitator using either paper or multimedia support could help the residents build new links. Assessment was by social science observatory method and by computation of a mathematic model.

Observation could show: that the tool used in the activity could not be assessed apart from the action of the facilitator, that the dynamic of the group changed with the apparition of collaboration between the members with the more fluent ones helping those more in difficulty find the solution. This was confirmed in our model with the person having the most intervention increasing their number of interventions, while those speaking the least not decreasing theirs. The successful facilitator seems to give the floor to the group.

This study is showing by direct observation that group activities can stimulate cognitive participation and social interaction. Multidisciplinary approach and modelling proved efficient where traditional statistics failed to deliver: it could be used in the assessment of other complex processes in natural setting.

Acknowledgements: we thank F. Vernhac who produced the multimedia tool and acted as a facilitator, M. Venturini who administrated the study for MSA services and Fédération Nationale des MARPA, J. Bernard who produced the raw observation data as part of her sociology master thesis and P. Mpondo-Dicka who gave the eye of semiotics. This study was embraced by the True Life Lab association.

Aging, Telemedicine and French Law Gauthier Chassang UMR/INSERM 1027

Telemedicine is a recent field where technological innovations are key to provide solutions to a number of real-life problems in healthcare services delivery. Emerging innovations in this field lead to conceive new health prevention, diagnosis and, to certain extent, care practices.

Based on the potential of information and communication technologies to provide innovative solutions to patients placed in specific situations of vulnerability, this field is currently developing in France, in particular regarding the challenges put by an aging population and medical desertification.

Since the Hospital, patients, health and territories Act n°2009-879 of 21 July 2009 and the Decree n°2010-1229 on telemedicine, France equipped with specific legal rules to frame this medical practice while meeting patients' rights and interests.

This presentation aims to identify the main advantages of telemedicine solutions for the medical taking in charge of aging patients and to present the French legal framework to be respected by professional stakeholders.

Remaining issues to be dealt with in the coming years to complete the framework and bring enough maturity to the field for a large-scale spreading will also be tackled.

The achievements and challenges for telehealth in China from industrial and legal prespectives

Shufeng Zheng PhD candidate, School of Law, Peking University

As the development of internet and telecommunication technologies, telehealth which allows distant health-related service and information comes into practice. Apart from overcoming distance problem, with wearable device, telehealth could achieve daily detection which is important for elderly health and chronic disease treatment. At the macro level, telehealth is also helpful for solving imbalance distribution of medical resources. For countries like China with large population and territory, telehealth development can be an effective way for solving health difficulties and improve the accessibility and availability of public to professional medical treatment. Telehealth in China has made many achievements and also face new challenges.

Telehealth Market in China: Various Business Model and Dependent on Government Policy

Two basic models in China which are B2B (business(hospital) to business(hospital)) and B2C (business to clients). B2B model can help solve the imbalance of distribution in medical resources in China effectively and is more easily to supervise which lead more government support. Until now, there are over 22 provinces set up provincial telemedicine platforms providing telemedicine, telesurgery instructions, online appointment and digital resource sharing. Companies under B2B model are highly depend on government policies. B2C model can achieve daily detection with wearable device and is more helpful for elder health and chronic disease. But B2C also requires higher technique and needs more investment for devices and software, it also faces the low accept rate issue especially for elder people who are not good at device operation. There is a need for division between two models. B2B companies can help patients in distant areas or villages with critical illness and B2C focuses more on the disabled people (especially for elderly) with chronic diseases.

Risk and Challenge towards Personal Data Protection

Since personal data collected during telehealth service is highly sensitive, any unlawful collection or use of such data may arise risks for privacy and personal data infringement. This problem can be complicated due to the m-health (mobile health) and c-health (connected health) trends which lead the data collection process more undetected and the need for data transfer is further expanded. There is a need for industry standard of medical data collection, use, store, encryption and transfer. Notification before every data collection, use and transfer can be more important and data subjects should be entitled to trace its data usage. Any unauthorized decryption should be regarded as an infringement of personal data. Professional medical institutions should be allowed to share the encrypted data within research purpose only after notification and encryption. Independent party`s supervision is also necessary, especially under current start up stage for telehealth industry.

Liability Distribution Issue

Parties involved in telehealth service including patients, doctors, hospitals and companies are quite complicated which lead the liability for medical malpractice distribution more difficult. Under B2B model, since the involved parties are all professional hospitals and the distribution of liability for accident can follow the traditional law rules. For B2C model, if the online pharmacy and advice all from doctors, the doctors need to take the liability and the platform may need to concern whether there is duty of care. Things may further complicated if the pharmacy process involves software or AI from telehealth companies, the company may need to take the duty as a product producer.

Designing a Digital Environment for Frailty Screening, Evaluation and Monitoring

BORGIEL Katarzyna¹, katarzyna.borgiel@univ-jfc.fr LAMINE Elyes^{1,2}, elyes.lamine@univ-jfc.fr PINGAUD Hervé^{1,3}, herve.pingaud@unif-jfc.fr BORTOLASO Christophe⁴, christophe.bortolaso@berger-levrault.com DERRAS Mustapha⁴, mustapha.derras@berger-levrault.com

¹Connected Health Lab, École d'Ingénieurs ISIS, INU Champollion ²Centre Génie Industriel, IMT Mines Albi ³Laboratoire de Génie Chimique (CNRS, UMR 5503), Université de Toulouse ⁴Berger-Levrault, Labège

Frailty is often defined as an elderly multidimensional clinical syndrome, characterized by decreased reserve and diminished resistance to stressors (Rolland et al., 2011; Vellas and Bernabei, 2015). It is an important risk factor of morbidity, disability, falls, inappropriate healthcare, institutionalization, poor quality of life, and even death (Rolland et al., 2011; Marzetti et al., 2015). Frailty management has become of central interest for the promotion of healthy and active ageing.

In France, the master process of frailty management can be described through a three stages model including (1) frailty screening, (2) frailty evaluation and personalised care plan definition, (3) and frailty monitoring (Benetos et al., 2015; Bonnefoy et al., 2015; Jenadel, 2015). A variety of patient data must be gathered and shared throughout the stages of the process. They concern different dimensions of the patient profile (e.g. physical, mental and social). Their measurement is performed with the help of many complementary assessment tools.

Each data collection stage faces its own challenges. Frailty screening, for example, requires frequent observations of possibly frail elderly living at home. Frailty evaluation and monitoring require to replicate frequently the evaluation surveys. Thus, the amount of data increases as it is spread over practitioners.

Information and Communication Technologies (ICT) can potentially help to address these challenges. Even if mobile technologies as well as IoT (Internet of Things) are potential candidates to draw an adapted environment to support the three stages model, many questions have to be addressed in order to find trade-off between elderly daily ways of life and their well-being, as well as practitioner's needs and measurement usefulness.

Developing solutions for such a context shall be done in an open innovation ecosystem. Our research is done in this kind of environment starting with two partners. The Connected Health Lab (CHL) is a public living lab inside the Engineering department of Champollion University. It is a member of the French Health and Autonomy Living Lab Network. CHL promotes a user centred approach for open innovation, aiming to fill the gap between the engineering community, on the one hand, the socio-medical and industrial communities, on the other hand. Berger-Levrault (BL) is a software editor and regulatory content publisher, with entities in France, Spain and Canada. It designs solutions for local authorities and public administrations, as well as public and private healthcare facilities, educational institutions, universities and private companies. Other partners will be invited to contribute in the future, with respect to the progress of work.

In partnership with the CHL, BL has recently developed a prototype of a mobile application for frailty screening and evaluation. The application includes a variety of frailty assessment surveys (e.g. ADL and IADL, MNA, MMSE) as well as compatibility with sensors (e.g. digital body

weight scale).

In addition to the more traditional advantages of a digital data medium (e.g. automatic score calculation or direct access to large amounts of historical data), the application eases manual assessment by automating answers to some survey questions. This feature is based on the semantic mapping of 29 different tests. In fact, when the user enters assessment data for a given test, the system suggests to automatically enter assessment data for other related tests. In addition, some questions can automatically be filled with collecting data from sensors. We experimented interoperability with a digital body weight scale but other sensors could be integrated to the system (e.g. heart rate monitor, physical activity sensor, smart glasses, etc.).

The introduction of a digital support for frailty screening, evaluation and follow-up is the first step towards a digital environment to manage this syndrome. Ongoing work has several goals, including: (1) to progress further in the study of different frailty data supports, and their interrelations; (2) to study the human acceptability and the technical feasibility of different forms of frailty data entry and sharing; and (3) to study the coordination into the frame of the frail elderly pathways and qualify the usage of ICT in this organisational context.

Our research approach is founded on model-based system engineering, i.e. is based on the assumption that business processes are combined of services. We aim to manage digital transformation as an innovation, based on an architecture whose value is brought by the parallel design of business services and digital services aiming to support them.

An innovative solution: Telegrafik smart care software plateform Deborah Parès Telegrafik / O-TONO-ME

Telegrafik is a French high-tech company created in 2013. Telegrafik developed a smart care software platform which transforms home sensors' data into added value services, such as alerting and monitoring services. Thanks to its smart software platform, Telegrafik can provide its customers with predictive statistics, behavioural patterns and real-time activity monitoring.

One of its main services is "Otono-me", an innovative telecare service allowing vulnerable people to live safer at home. Friends and family can remotely watch over their loved ones, while respecting their intimacy. For elder people, it aims to improve the autonomy without wearable. For the carers/family, it enables them to keep a remote and discreet eye on their parents and being warned when something unusual happens.

Once the house of the elderly person is equipped with discreet sensors, activity is constantly monitored.

The person lives as usual, Otono-me watches over. Should something abnormal occur, an alert is sent to relatives or help lines. No internet connection is required, and without any screws or holes!

Every day, Otono-me service gets to know Colette's patterns of behaviour. The software will be able to trigger automated alerts in the event of:

– a fall,

- an episode of dizziness or fainting,

– unusual behaviour (e.g. : Colette did not go into the kitchen at lunchtime).

Besides, carers have access to a smartphone application, also available online, to keep a discreet eye on their loved ones. Every morning, the family consults Otono-me's application, and knows that their elderly person normally got up. They receive a text message when the person goes out of its house for too long.

Thanks to Otono-me, the carers watch over the person, and they detect the moments when the person needs more support.

More details in this short video: <u>https://www.youtube.com/watch?v=GGo3F4dR1po</u>

E-health solutions to sustain integrated care models for elderly people Emmanuel Sicard MHComm society



About MHCOMM :

MHCOMM is a technology company, dedicated to bring innovation for a better life to all people whose health matters. Our research and development in partnership with the healthcare providers makes up the most of our global sales revenue, just to reach a dream come true for the ones in need of care.

We believe people dedicated to others deserve the right digital health solutions to better deliver care and stay close to their patients. Our sole achievement is to connect the care continuum to home.

MHComm offer a customizable platform by disease and population relying on a rich telehealth application ecosystem encompassing patient screening, care coordination, assisted clinical decision, and patient education services. It connects the patient's home to the healthcare providers and the caregivers for a better care delivery and patient engagement.

eHealth solution to sustain integrated care models for elderly people

With the growing challenges that our modern society is facing like the population ageing, the increasing chronic disease and the scarcity of healthcare resources, new model of organization are taking place to provide the right care to our elders they deserve. The integrated care pathways allowing them to stay at home longer are the most promising ones.

Integrated care can be broadly defined as an approach to create connectivity, alignment and collaboration within the healthcare system on one hand and between the healthcare system and social services on the other with the aim or improving quality of care, patient quality of life, consumer satisfaction and system efficacy. Models of integrated care have been developed in many countries.

Integrated care is particularly appropriate for elderly people with chronic and multiple medical conditions and functional disabilities (cognitive impairment, dementia). Beside the cure, it is also suitable for the fragile ones with a prevention care. For these groups of patients treatment and care is usually fragmented and poorly coordinated. As a result available services and resources are often inadequately used, treatment and care does not come at the point of need, and undesirable or potentially hazardous health changes may be identified too late. Imperfect functioning and performance of the health and social care system leads to unnecessary hospital admissions, unduly long duration of hospital stays, and premature nursing home placements. Integrated systems of care can enable access to community support, social and medical care at the point of need, timely evaluation.

Connecting the home to the care continuum with the importance of information exchange, shared and evidence-based decision making and patient involvement for the efficient planning, organisation and coordination of health and social services, information and communication technology (ICT) systems and services are essential enablers of integrated care. An increasing number of ICT systems and technologies capture or store healthcare data, such as electronic patient records (EPR), personal health records, registries and telemonitoring solutions. However, digital healthcare data often remain in information silos and are not analysed to exploit the potential insights they might provide for increased profitability or enhanced performance of healthcare. Furthermore, information sharing across healthcare sectors is still hampered by lack of interoperability between ICT systems of lack of data sharing agreements between clinicians and care providers (formal or informal).

The eHealth solutions developed by MHComm and widely deployed in France tackle those hurdles for different integrated care pathways allowing the elderly to stay at home like the Hospitalization At Home (HAH), Ambulatory, Chronic Diseases or Connected Nursing Home.

MHCARE, a coordination tools suite relying on a mobile Electronic Health Record (HER) used outside the hospital to help physicians, nurses and caregivers practice better medicine, coordination and improve the patient's management from the hospital to home for those whom require an acute care (hospitalization at home, complex chronic diseases and co-morbidities).

MHLINK, a patient relationship management keeping engagement up allowing the connected hospital (with the home care organization in some case) to screen patients at risk making sure they are engaged with no deteriorated health issue and having the possibility to adapt the treatment or the care program based on the last events.

MHLIVE, a two-way video call strengthening the collaborative needs and securing also the management of critical situation.

Connected objects and robots: the Grail for the elderly ?

B. Couderc and J.A.M Tafani

The general population is aging. 25% of the population will be over 65 by 2030. There is urgent need to find ways to keep senior citizens in their homes for as long as possible. Care, in health care facilities, induces, on the one hand, a loss of autonomy, a worsening of the patients' general condition and poorly mastered poly-medication, with deleterious and cumulative effects, and on the other hand, significant costs to society.

One of the objectives of public health policy is home care of the elderly but in conditions of safety and comfort.

Robotics and connected objects can help keep elderly people at home. Their positive aspects are numerous (security, the peace of mind of loved ones ...). On the other hand, certain aspects of their integration into the lives of the elderly can be questioned. In addition to the aspects concerning the protection of data generated by connected objects that will be developed by others speakers, we can raise some ethical concerns about the benefits posed by the access to the connected objects of the elderly. Can we be sure of the reliability of the connected objects sold on the Internet and their job security? Will the intrusion of relatives or caregivers in the analysis of data generated by connected objects (the number of steps taken daily, the amount of water drunk ...) not be experienced as an invasion of people's privacy? Will using robotics and connected objects on a daily basis not induce object dependence leading to diminished autonomy?

That question is specifically addressed to social robots for the elderly. Robots can be defined as autonomous entities that interact and communicate with human beings in accordance with the social norms and social behaviors attached to their functions. There are robots that provide physical assistance (nursing robots involved in cleaning, cooking and personal hygiene), companion robots, and health and safety surveillance robots. A robot capable of performing daily tasks found difficult to perform by senior citizens can be beneficial. Its goal is to ensure the safety of those people (risk of falling, heart failure, mobility disorders) at home. One can just question of the purpose of those robots, to really help the elderly or to lighten the burden of taking care of the elderly? Companion robots can be used in a medical context to reduce the loneliness of the elderly and prevent the behaviors associated with dementia. We can wonder what feelings will be caused by these robots and more generally about the elderly's dependence on them, and especially, if those robots will respect the elderly. At the moment there are questions about the future acceptability of robots by the elderly and their entourage and the motivation to use them. One can also question the cost and maintenance of robots, and its effects of its use on the role of caregivers. Finally, given the increased autonomy of robots, the question arises: who exactly should bear the ethical and / or legal responsibility for the behavior of robots?

Understanding the needs for connected objects and the seniors: a classification based on acceptation levels.

Julien Duguet INSEEC School of Business and Economics, UMR/INSERM 1027

Today, in most western countries, people tend to live older than in the past: this is due to medical, sanitary, and social progress. But bad health and nutrition habits (alcohol, tobacco, urban pollution...) lead to aging in poorer medical condition. This means living longer, but also longer in bad health. With a clear deficit of residential and medical facilities for elders, this involves an increasing number of elders staying at home, frequently isolated, with distant care from family helpers.

Recent technological advances in connected objects include monitoring devices, for personal physical constants, or for surveillance of others. This technology can be divided into 2 categories: devices that require human action, and devices that are autonomous. The latter are more suitable for elders, for they require no action, and become part of daily life.

Literature showed evidence that elders are willing to accept any technology that can maintain them at home, if it is not a [financial] burden for their family. There is also an irrational level of expectations of what the technology can do, both with its easiness-of-use and its perceived utility, from both elders (users) and family (most of the time, prescribers). This leads to several ethical issues that we are exploring in our research.

On one hand, elders are willing to relinquish some form of autonomy and privacy in favor of extended stay at home, either strengthened by overrated hope from technical solutions or limited knowledge and acceptation of the solutions.

On another hand, family helpers who live far from their supported elders, might rely too much on technical assistance and ignore basic social needs, following constrained choices and moral dilemmas. We try to offer a cartography of solution types with pros and cons to facilitate a more ethical choice from elders, helpers, and medical practitioners.

Legal protection of e-health data Huili Xu PhD candidate, School of Law, Peking University

Electronic healthcare data are data elements of electronic healthcare records. They have great potential value when applied in medical research and health service. Countries from all over the world are collecting electronic healthcare data and building large databases. In China we have advantages in building electronic healthcare databases owing to our large population base. Our government is also promoting the development of electronic healthcare databases, especially with new technologies like cloud computing, big data etc. Notably, aging people as a vulnerable group are major providers with electronic healthcare data develops within a good legal framework.

The application of electronic healthcare data is supposed to bring about various benefits, like clinical decision support, new drug researches, precision medicine etc. Yet, there exist several factors that impede effective application of medical healthcare data, one of which is privacy and data safety issues. Electronic healthcare data mostly belong to sensitive personal data. Different from general personal data, patients as data subjects would suffer more if their healthcare data were leaked, especially when the data are related with sexuality or personal mental state. Thus there is a tension between patients' privacy and the exploitation of electronic healthcare data. When patients devote their privacy to public interests, it is essential to ensure their control on their own personal data with relevant laws and regulations.

In our legal system there are several provisions that protect patients' privacy which mainly regulates on doctors, nurses or medical agencies. These regulations used to work well in traditional medical practices. When transformed into electronic data, the records are shared between different data controllers and processors. As a consequence, patients' data are posed to various legal challenges. At present, our General Provisions of the Civil Law and Criminal Law has provisions on the protection of personal data. Besides, there are some regulatory documents formulated by state administrations which contain clauses related to the protection of personal healthcare data. The regulatory documents are not legal authorities.

Overall, these clauses are possibly unable to provide sufficient legal protection for personal data. Firstly, there is no specified scope of personal data that are legally protected. Secondly, there is no legal protection for patients' rights to control their data. Thirdly, there is no supervision or restraint on the behavior of the government and its staff. Last but not least, there is no special legal protection for electronic healthcare data. Only with a complete legal protection system for either electronic healthcare data or for personal data with special regulations on healthcare data, could patients be confident to license their data to hospitals or governmental agencies. In this legal system, there are several points that must be specified. First of all, it should be specified whether to protect patients' electronic healthcare data with the right of privacy or with the right of personal data. Then contents of the right should be specified. At last, regulations on governments' behaviors should be specified.

Data protection: the example of elderly and profiling Christophe Ozanne Université Toulouse1 Capitole

With the development of new technologies and the use of computer algorithms, data collection has been facilitated and intensified. Big data concerning all fields of activity, medicine and pharmacy are no exceptions.

Among the personal data which are collected, some of them have a special protection: the sensitive data and among them, the medical data. Targeted by the law called "informatique et libertés" of January 6th, 1978 and the GDRP, the collection of these data are, in most of cases, prohibited. However, some collection authorizations cases are planned and strictly supervised in order to protect human rights.

Indeed, these medical data can be profiled for different purposes. Some are legitimate, such as the ones for the search for diseases, and some others aren't and can lead to discrimination like profiling in insurance mater.

The contribution's goal is to present the data protection regime by taking as an example the medical data and the use that can be made of it, in particular through the profiling.

Ethics and assistive technologies for the elderly: Balance of interests of the elderly and their caregivers

Anne-Marie Duguet Senior Emeritus lecturer UMR INSERM 1027

Assistive technologies are offered for the well-being of the elderly. Family or caregivers consider that safety is more important than respect for autonomy and privacy. This is why it is necessary to balance security with the right to privacy.

There is no gerontological specificity to the use of ATs. Even though geronto-technologies are a booming market, the age itself does not justify them¹. Elderly people are no different from other vulnerable and fragile people. Moreover most aging people keep their autonomy and are able of decision making.

Elderly with cognitive impairment need assistance and supervision. Their troubles raise questions of decision-making, ability and validity of consent. However the person knows very well how to show he or she accepts or not a care or a device. His or her assent must be sought and his opposition respected in any cases.

Obtaining consent of the elderly persons respects their autonomy. They must be associated with the decision to set up a monitoring device, and must be informed of the exit modalities of the device in a way adapted to their understanding skills (special training for professionals).

Disadvantages: A secure environment for fragile subjects reassures caregivers and the family but can be felt by the old person as being in prison. If there is no freedom to take tracking device off, some persons can feel humiliated and trapped. When they are too obvious, certain devices visible to others may affect the sense of pride and dignity of the elderly and generates a bad feeling of stigmatisation.

The benefits for the family, the caregivers: In France there are 7 caregivers aged 45-64 for a person over 80, in 2030^2 there will be only 4 who, consequently, will need technical assistance. Through communicating objects, caregivers and medical professionals will have access to information relating to health, nutrition, hygiene and social interaction. Patient associations consider that the main purpose of geronto technologies is to reassure the family, or to relieve professionals of mechanical tasks, which are painful but these associations refuse that intelligent robotics replace human contact³.

Concluding remarks : According to the principle of proportionnality, the level of intervention should be retricted to what is really needed for a particular person in a particular situation.

For a best protection of the rights of older people in the use of ATs, ethical recommendations adapted to the capacity of understanding are necessary. The Alzheimer Europe report⁴ provides guidelines specifically linked to tracking and surveillance technology for people with cognitive impairment.

¹ Moulias Robert « Nouvelles technologies : aspects éthiques et application à la gériatrie et la gérontologie » Gérontologie et société, 3/2008 n°126p 129-139

² « La technologie accompagne les aidants dans une autonomie évolutive » Le Monde 23 /11/2016

³ Jaumotte A et Brard C. (2012) Les gérontotechnologies au cœur de nombreuses questions éthiques Analyses Enéo,2012/22

⁴ Alzheimer Europe 03-2010 Assistive technologies

List of participants registered on September 20th

Pr Vellas Toulouse Gérontopôle Pr Fati Nourhashemi Philippe Baretto Toulouse Gérontopôle Emmanuelle Rial UMR/INSERM 1027 Pr Jacques Larrieu Toulouse1 Capitole Pr Xiaoyang Chen Shandong University Pr Wu Tao Xi'an Medical University Pr Shu De Feng President Shandong Medical college. Chen Xin Vice President of IHRI Jiao Tong University Pr Li Du Faculty of law, Macao University Gauthier Chassang UMR/INSERM 1027 Shufeng Zheng PhD candidate, School of Law, Peking University Pierre Rumeau Laboratoire de gerontotechnologie de La Grave Gérontopôle Elisabeth Bougeois Laboratoire de gerontotechnologie de La Grave Gérontopôle Deborah Parès Telegrafik **Emmanuel Sicard MHComm Society** Julien Duguet UMR/INSERM 1027 Huili Xu PhD candidate, School of Law, Peking University Christophe Ozanne Université Toulouse1 Capitole Anne-Marie Duguet UMR/INSERM 1027 Bettina Couderc UMR/INSERM 1027 Mathieu Taffani CHU Toulouse Jenny Duchier Remi Bastide Ecole d'ingenieur ISIS Liwen Zhang IMT Mines d'Albi Katarzina Borgiel Institut Universitaire Champollion Elves Lamine Enseignant Chercheur à l'Ecole d'ingenieur ISIS Mogens Thomsen UMR/INSERM 1027 Alfonsina Faya Roblès UMR/INSERM 1027

Sovan Lek Université Paul Sabatier