

The China Health Policy and Management Society  
中国卫生政策与管理协会(海外)

# China Health Review

## 中国卫生评论

Volume 4 Issue 3, October 2013

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China Health Review (CHR), published quarterly, is the official online magazine of the China Health Policy and Management Society (CHPAMS). The CHR is intended to promote health research, policy, practice, and education related to China and the general population health sciences by providing research and policy updates, topical reviews, and other appropriate information. Targeted audience includes (1) academic researchers within and outside of China; (2) policymakers within China; (3) other interested parties including nonprofit organizations and business leaders as appropriate.

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## EDITORIAL INTRODUCTION

The October 2013 issue of China Health Review includes Part II of the China Medical Board (CMB) Open Competition (OC) Interview Series and a research article by **Professor Leiyu Shi**, in addition to our usual sections.

In the *CMB-OC Interview Series: Part II*, we invited an anonymous CMB-OC reviewer and three finalists (**Drs. Yu Fang, Jin Yan, and Wenjie Gong**) to share their experience and insights.

In the *Research Article* section, **Professor Leiyu Shi** and coauthors discussed job satisfaction among Chinese primary care doctors following the recent healthcare reform. The paper received the 2013 China Health Policy and Management Society (CHPAMS) Best Papers Award.

*Research Twitter* provides summaries of eleven recent publications, covering topics such as community-level text messaging for 2009 H1N1 prevention, probable person to person transmission of novel avian influenza A (H7N9) virus, determinants of healthcare-seeking delay among tuberculosis patients, effects of New Cooperative Medical Scheme on access to care and financial protection, adult body mass index and overweight from 1991 to 2009 in China, acetaminophen and/or antibiotic use in early life and the development of childhood allergic diseases, assessing equity of healthcare utilization in rural China, prevalence and control of diabetes in Chinese adults, rapid health transition in China (1990–2010), epidemiology of Alzheimer's disease and other forms of dementia in China, and the efficacy, safety, and immunology of an inactivated alum-adjuvant enterovirus 71 vaccine.

*Policy Practice and Updates* includes six updates concerning topics such as assuaging local resistance to out-of-network health insurance reimbursement, Guangzhou City's initiating pilot reform of county-level public hospitals, releasing of the report on "designing social security system", improving medical insurance for residents, advancing pilot catastrophic insurance, and participating of newly graduated college students in workers' medical insurance in the city of Wuhan before taking a job.

In *About CHPAMS*, we introduce to you **Dr. Qi (Harry) Zhang**, an active CHPAMS Planning Committee member and a tenured Associate Professor in the College of Health Science at Old Dominion University. You will also find recent career and professional updates for **Drs. Zhuo (Adam) Chen** and **Kun Zhang**, and recent publications lead-authored by CHPAMS members including **Drs. Jay Pan, Xinglin Feng, and Longjian Liu**.

Enjoy Reading!

## 导读：

2013 年 10 月刊《中国卫生评论》除常规栏目外，还包括美国中华医学基金会公开竞标项目访谈专题系列（II）、2013 年中国卫生政策与管理学会最佳论文奖获得者**石磊玉教授**的研究文章。

在美国中华医学基金会公开竞标项目（CMB-0C）访谈专题系列（II）部分，我们邀请到一位 CMB-0C 项目的匿名标书审稿人、以及**方宇博士**、**严谨博士**和**龚雯洁博士**，来分享他们关于 CMB 公开竞标项目的经验和观点。

在**研究文章**部分，**石磊玉教授**在他获得 2013 年中国卫生政策与管理学会最佳论文奖的文章中，探讨了中国初级保健医务人员的工作满意度。

**研究动态**栏目提供了对 11 篇近期学术文章的总结，涉及领域包括：2009 年预防 H1N1 短信的社区干预、疑似可通过人与人传播的新型禽流感病毒（H7N9）、结核病患者就诊延迟的决定因素、新农合对获得医疗服务和筹资保护的影响、中国 1991 至 2009 年成年人 BMI 指数和超重问题研究、早期对乙酰氨基酚及抗生素使用对儿童过敏性疾病的影响、中国农村医疗服务利用的公平性分析、中国糖尿病患病率和预防、中国 1990 至 2010 年疾病与健康状况的快速转型、中国阿兹海默综合征及其它痴呆症流行状况、以及肠道病毒 71 型灭活疫苗功效、安全性和免疫效果分析。

**政策与新闻**栏目提供了包括医保异地结算要破除地方抵制、医改办启动首批县级公立医院改革试点自评估工作、广州启动县级医院改革试点、《社会保障机制改革的方案设计》报告发布、以及人社部关于提高居民医保待遇和推进大病保险试点的工作安排、武汉市未就业应届毕业生可参加职工医保等 6 个方面的最新消息。

在 **CHPAMS 之声**栏目，我们向您介绍中国卫生政策与管理学会筹备委员会成员**张琪博士**——美国欧道明大学健康科学学院终身职副教授。您还可以看到**陈茁博士**和**张坤博士**的近期工作和学术活动信息，以及学会成员最新发表的文章。

阅读愉快！

## INTERVIEW

### CMB OPEN COMPETITION INTERVIEW SERIES

美国中华医学基金会公开竞标项目访谈专题

#### SERIES INTRODUCTION

专题介绍

By *Jing Li*, MA, University of California at Berkeley  
李婧，硕士，加州大学伯克利分校

This is the second part of the CMB Open Competition (OC) interview series. The first part of the series was published in the July 2013 issue of *China Health Review* (Volume 4 Issue 2). Please refer to the July issue for details of the OC program, review process, and purpose of the series.

The second part of the CMB-OC interview series includes the following:

- One interview with an **anonymous proposal reviewer** for CMB OC (interviewed by Donglan Zhang).
- Three interviews with CMB-OC finalists: **Prof. Yu Fang**, **Prof. Jin Yan** (interviewed by Dr. Kun Zhang) and **Prof. Wenjie Gong** (interviewed by Dr. Rui Li).

## INTERVIEW WITH CMB OPEN COMPETITION PROPOSAL REVIEWER

美国中华医学基金会公开竞标项目(CMB-OC)公开竞标项目审稿人访谈

By *Donglan Zhang*

张冬兰

The interviewee is an anonymous proposal reviewer for China Medical Board (CMB) 2012 Open Competition (OC).

受访者为美国中华医学基金会(CMB)公开竞标项目匿名审稿人。

Donglan Zhang is a PhD candidate in the Department of Health Policy and Management at University of California, Los Angeles.

张冬兰为洛杉矶加州大学卫生政策与管理专业博士研究生。

Donglan: What is your overall assessment of the proposals submitted to CMB 2012 OC? Do you have any suggestions for applicants in light of the comparison between this year (2012)'s OC proposals and those submitted in earlier years or proposals submitted for other funding opportunities?

张冬兰：请问您对于此次 CMB 公开竞标项目提交的申请标书总体评价如何？和前几年提交的项目申请或其他资金的项目申请比，您有哪些特别的建议？

Interviewee: The OC proposals share the following common features: 1) high policy relevance; 2) lack of familiarity with the existing evidence and theory; 3) room for improvement in terms of research method; 4) excellent teamwork and collaboration. This is the first time I am reviewing for the competition, so I cannot speak about comparison over time.

受访者：公开竞标项目的申请标书有以下共同特点：1) 与政策高度相关；2) 不够熟悉研究领域内现有的证据和理论；3) 研究方法仍有待加强；4) 具有相当程度的团队合作。这是我第一年做评审，所以尚没有比较。

Donglan: What are the areas that need improvement of the proposals? Can you elaborate on one or two areas that you think are the most critical?

张冬兰：您觉得这些项目申请书有什么需要改进的地方？能否解释一下您认为最关键的一个或两个方面？

Interviewee: Many applicants have not had a thorough survey of the field. They show a lack of knowledge about the research and practice within and outside of China in their areas of research. This is even more critical than the deficiency in research method.

受访者：很多申请者对他们的研究领域缺乏足够阅读，不少项目申请缺乏对中国国内和国外研究与实践的了解，而这一点比方法上的缺陷更严重。

Donglan: We really appreciate and admire your effort in improving the quality of health research in China. Do you have any suggestions for junior researchers who plan on submitting proposals for CMB funding?

张冬兰：我们非常景仰和感激您对提高中国卫生研究质量所做的努力，您对计划申请 CMB 项目的年轻学者有什么建议吗？

Interviewee: I have two suggestions. The first is to form collaborative relationship with senior researchers. By "senior" I mean those having substantial international research/publication experience. The second is to collaborate with health practitioners. These are professionals who are experienced in clinical/hospital management practice within and outside of China.

受访者：两点建议：1) 与资深研究者合作，“资深”意味着具有更多的国际研究经验和论文发表经验；2) 与卫生从业者合作，主要指在国内外具有丰富临床或医院管理实践的人。

Donglan: From your perspective, could you please recommend some future research directions or identify existing gaps in health research in China?

张冬兰：从您的角度，能否推荐一些中国卫生研究中有前景的研究方向或目前的研究空白？

Interviewee: Qualitative study is a huge gap in health research in China. Case study, participatory observation, cognitive interview, and focus groups are all very important tools and methods in formulating hypotheses.

受访者：定性研究是个很大的空白。案例研究，参与性观察，认知访谈和焦点组访谈等都对形成研究假设非常重要。

Donglan: Do you have any words of wisdom for junior scholars in Health Policy and Systems Science (HPSS)? Do you have any suggestions as to how CHPAMS may contribute to the capacity building of HPSS research in China?

张冬兰：您对卫生政策与系统科学研究领域的年轻学者有何建议？您认为我们中国卫生与管理学会应如何帮助提高中国卫生政策与系统研究的能力？

Interviewee: Matching overseas scholars with Mainland Chinese scholars might be a good strategy. CHPAMS could facilitate the process of matching overseas mentors with young scholars in China. Many Chinese scholars are able to obtain financial support for visiting scholar programs with international institutions. However, there is no good mechanism to pair them up with the appropriate mentors through the program. Therefore they cannot make full use of their time while studying abroad.

受访者：海外学者与中国国内学者的匹配合作可能是个不错的方案。中国卫生政策与管理学会能很快帮助初级学者找到合适的海外导师。不少中国学者能申请到资金成为海外访问学者，但目前没有一个成熟的机制帮助他们匹配合适的导师，所以浪费了很多他们在海外学习的时间。

## INTERVIEW WITH DR. YU FANG (ASSOCIATE PROFESSOR, XI'AN JIAOTONG UNIVERSITY)

方宇博士(西安交通大学副教授)访谈

By Kun Zhang Ph.D.

张坤

Dr. Yu Fang is an associate professor in the Department of Pharmacy Administration at the School of Medicine, Xi'an Jiaotong University. Dr. Fang's research interests focus on assessing the accessibility of essential prescription drugs in western China and evaluating outcomes of pharmaceutical care for patients with hypertension. Dr. Fang has published multiple peer-reviewed journal articles and book chapters.

方宇博士是西安交通大学医学院药理学系副教授。他的主要研究方向为国家基本药物目录所涵盖的药物的可获得性评估及改进，以及对治疗高血压病人药物效果的评估。方宇博士已经发表了多篇同行评审学术论文，参与了多部学术著作的编写。

Kun Zhang is a Prevention Effectiveness Fellow at the Centers for Disease Control and Prevention

张坤博士是美国疾病控制与预防中心研究员。

Kun: What aspects of the CMB Open Competition (OC) grant you find the most appealing?

张坤：CMB 公开竞标项目的哪些方面吸引了你的参与？

Dr. Fang: What appeals to me the most is the purpose and theme of the CMB OC, which is to improve health policy and systems sciences (HPSS) research capacity in China through supporting researchers in medicine and public health across China. Second, CMB OC emphasizes emerging health challenges and the new healthcare reform in China, and it is willing to fund research in these areas to ensure that people in China have equitable access to healthcare. Third, CMBOC provides young researchers in China a great platform for international and domestic exchange.

方宇：有三个地方非常吸引我。第一，CMB 公开竞标项目的目的是通过选拔并支持我们这些研究人员来改进中国的卫生政策与卫生体系科学的研究。第二：CMB 公开竞标项目强调支持对于中国当下医疗卫生体制改革以及目前医疗卫生面临的新挑战的研究，并且希望通过这些研究来确保每一个中国人都平等的享受医疗卫生服务。第三，CMB 给这一领域里中国年轻的学者们提供了一个前所未有的国际与国内交流的平台。

Kun: Are there any lessons learned from participating in the CMB OC?

张坤：这次申请 CMB 公开竞标项目过程中，哪些经验对你最重要？

Dr. Fang: The application for CMB Open Competition grant led to many new ideas for me when searching for research topics and carrying out HPSS studies. Moreover, in the second round of the review process, the reviewers provided constructive comments on study design, data collection, feasibility of the proposal, and the budget planning. These comments are extremely helpful to my future research and grant writing. I truly appreciate the effort and contribution of all the reviewers.



方宇：这次申请 CMB 公开竞标项目给了我很多关于选择研究课题以及具体实施卫生政策和卫生体系科学研究的启发。最重要的是，在项目审核的第二阶段，项目申请评审专家给了我很多建设性的意见，例如对于我的研究设计，数据收集，研究可行性等。这些建议对于我今后的研究以及继续的申请很重要。我衷心感谢这些评审专家所作出的努力与贡献！

Kun: As an expert in pharmaceutical policy research, what do you think are the major causes for the high price of pharmaceutical products in China?

张坤：作为一位药物政策研究领域的专家，你认为目前我国药价高的主要原因是什么？

Dr. Fang: In my opinion, the long-standing public hospitals' reliance on drug sales to generate revenue is the main reason of the high price of pharmaceutical products in China. In 2009, national health care expenditure in China totaled \$240 billion, about 5% of China's gross domestic product (GDP). Spending on drugs accounted for more than 40% of total expenditure, which is one of the highest in the world. The high pharmaceutical expenditure is associated with both high retail prices of drugs and high utilization, some of which are irrational and unnecessary. Furthermore, both price and utilization factors are deeply associated with policies including overall health sector regulation, health care financing policies, and pricing policies. Recognizing the major causes for the disproportionately high pharmaceutical expenditure, the new round of health care reform particularly emphasized the establishment of National Essential Medicines System (NEMS), and the implementation of public hospital reform and promoting rational use of medications.

方宇：公立医院长期依赖药物出售来创造收入是中国药价高的主要原因之一。2009年，中国的医疗卫生支出达到2400亿美元，占全国GDP的5%。其中药物支出就占到40%，这在全世界范围内来讲都是非常高的。药物方面的高支出是因为高药价以及高使用，其中对很多药物的使用都是非理性以及不必要的。高药价和高使用又与中央对于医疗卫生部门，例如制药企业以及公立医院的监管，以及定价政策紧密相连。正是因为对这些原因的及时认识，在新一轮的医疗卫生改革中，中央强调对于国家基本药物目录的建立以及公立医院的改革，和促进合理用药。

Kun: What do you think are the pros and cons of establishing a National Essential Medicines system by the central government?

张坤：你认为由政府来制定国家基本药物目录的优势和劣势是什么？

Dr. Fang: According to the WHO Framework for Action, "access to health care including essential medicines is part of the fulfillment of the fundamental right to health. All countries are obligated to work towards the fulfillment of equitable access to health care services and commodities, including essential medicines necessary for the prevention and treatment of prevalent diseases. Appropriate policies and action plans need to be put in place to achieve this aim". In response, as one of the top five priorities of the Chinese government's systematic plan announced in 2009 aiming to achieve universal access to healthcare by 2020, the establishment of a NEMS to meet basic needs for treatment and prevention and ensure drug safety, quality, and supply was particularly emphasized. I am pretty optimistic that by improving access to existing essential medicines in China, more and more people will share the benefits of the healthcare reform. Meanwhile, it is urgent to generate evidence about the impact of the NEMS on access to and affordability of medicines, as well as to support the central government's implementation of sound pharmaceutical policies.

方宇：根据世界卫生组织的行动框架，平等享有医疗卫生服务包括基本药物，是保证人类健康权利的一个根本。所有世卫组织成员国都应该努力让其国民平等享有医疗卫生服务和物品，包括基本药物，来预防和治疗疾病。成员国需要制定相关的政策和行动计划来保证这一目标的实现。中国政府对于这一框架做出了积极的回应。2009年，中国政府制定了一个系统的计划来保证在2020年前实现全民享有医疗卫生服务。这一计划强调了五个重点领域，其中一个就是建立全国基本药物目录。建立基本药物目录的目的就是保证人民对于疾病基本的预防的治疗，保障药品安全，质量，以及供给。我本人对于通过改善对基本药物目录药品的获取使人民最终享有医疗卫生改革的好处保持乐观的态度。同时，我们也亟需相关的研究来评估建立基本药物目录对于民众用药难用药贵问题的影响，这样才能更好地为中央实施药品政策提供建议与支持。

## INTERVIEW WITH DR. JIN YAN (PROFESSOR, CENTRAL SOUTH UNIVERSITY)

严谨博士（中南大学教授）访谈

By Kun Zhang, Ph.D.

张坤

Dr. Jin Yan is a Professor and Deputy Director of the Department of Nursing at the 3rd Xiangya Hospital, Central South University in China. Dr. Yan's research interests focus on care coordination between hospitals and communities for patients with chronic obstructive pulmonary disease (COPD) and care and education for children with HIV/AIDS in China. Dr. Yan has published multiple peer-reviewed journal articles.

严谨博士是中南大学护理学院教授并兼任护理学院护理部副主任。她的主要研究方向为如何协调并整合医院与社区资源来帮助患有慢性阻塞性肺病病人康复，以及对携带艾滋病毒和患有艾滋病未成年人的治疗与教育。严谨博士已发表了多篇同行评审学术论文。

Kun Zhang is a Prevention Effectiveness Fellow at the Centers for Disease Control and Prevention.

张坤博士是美国疾病控制与预防中心研究员。

Kun: What aspects of the CMB Open Competition (OC) grant are the most appealing to you?

张坤：CMB 公开竞标项目的哪些方面吸引了你的参与？

Dr. Yan: It is the theme of the CMB OC, which is to promote health policy and system sciences (HPSS) research in China through selecting and supporting researchers in this area that attracts me the most.

严谨：CMB 公开竞标项目最吸引我的地方是它的目的和主题，即通过选拔并支持我们这些研究人员来推广并改进中国卫生政策与卫生体系科学的研究。

Kun: What aspects of your background and research experience do you think helped you get funded?

张坤：这次申请 CMB 公开竞标项目过程中，你认为你的研究背景和经验的哪些方面对你最有帮助？

Dr. Yan: I have to say that the training of CMB-991 in 2011 benefited me a lot. In addition, I believe my doctoral training and research in epidemiology and statistics helped me. Lastly, my visit and study in the Chinese University of Hong Kong in 2011 improved my writing in English which is also crucial for applying the CMB OC grant.

严谨：于 2011 年举办的 CMB-991 培训让我在这次竞标中受益匪浅。其次，我认为我博士期间流行性病学和统计学的系统学习对我帮助也非常大。最后，我在香港中文大学期间的访问和学习对我的英文写作是一个提高，这个对于 CMB 公开竞标项目申请很重要。

Kun: In your CMB OC research, what measures did you use to ensure the validity of randomization?

张坤：在你的 CMB OC 研究项目中，你们运用了哪些方法保证该研究随机分组的有效性？

Dr. Yan: In addition to our own work and effort, we have professional consulting company in statistics and research design to ensure the validity of randomization.

严谨：我们在最大的保证该研究随机分组的科学性的过程中，获得了专业的研究咨询机构的参与和帮助。这对于确保随机分组的科学性和有效性会是一个帮助。

Kun: You mentioned that reform in hospital outreach is one of the focus areas in China's public hospital reform since 2009. What is the impact of the reform so far? What else do you think should be done to improve hospital outreach intervention?

张坤：你提到过 2009 年的公立医院改革的一个核心方面是改革公立医院如何将疾病干预深入到社区。那么这次改革的成果如何？你认为这个方面的改革应该如何深化？

Dr. Yan: The reform is not sufficient so far. More reform is needed on the public hospital payment policy and delivery system. I think the next focus should on compensating public hospitals for community intervention. Hospital community outreach intervention would be improved if payments to public hospitals cover the cost of the intervention.

严谨：上一轮的改革还不是很彻底，特别是对于公立医院如何在社区提供疾病干预。我认为接下来的重点应该是有针对性的改善对于公立医院提在社区提供疾病干预进行补偿。如果这一点能得到一些改善，那么公立医院在社区提供疾病干预才有可能得到改进。

Kun: As you pointed out, air pollution and smoking are both important risk factors for COPD in China. What would be the impact of these factors on incidence of COPD in the near future given the deterioration in air pollution and expanding smoking population in China?

张坤：你提到过空气污染和吸烟都是慢性阻塞性肺病的风险因素，那么考虑到目前中国的空气污染状况在恶化，吸烟人群的扩大还不能得到有效控制，这对于慢性阻塞性肺病的发病率意味着什么？

Dr. Yan: I anticipate higher incidence of COPD if the air pollution in China continues to deteriorate. This will likely to be a heavy burden to the healthcare system in China in the near future. More research is needed to quantify the impact of air pollution.

严谨：我认为慢性阻塞性肺病的发病率只可能继续恶化，如果空气质量继续恶化，并且没有其他更好的预防手段的话。很有可能在不久的将来，这一疾病会给我们的医疗卫生系统带来沉重的负担。然后，我们也需要更多的研究来对这样影响进行量化。

## INTERVIEW WITH DR. WENJIE GONG (SENIOR LECTURER, CENTRAL SOUTH UNIVERSITY)

龚雯洁博士（中南大学高级讲师）访谈

By Rui Li, Ph.D.

李蕊

Dr. Wenjie Gong is a senior lecturer in the School of Public Health at Central South University. As a clinician-turned public health researcher with reproductive medicine and gynecology background, Dr. Gong's research interests focus on women's health, especially in reproductive health and mental health.

龚雯洁，中南大学公共卫生学院讲师。龚博士有医学与妇产科临床背景，主要研究方向为妇女健康与精神健康。

Rui Li is a Senior Service Fellow at the US Centers for Disease Control and Prevention.

李蕊博士是美国疾病控制与预防中心高级研究员。

Rui: Could you please introduce yourself, your team, and your proposed project?

李蕊：能否介绍一下您和您的团队，以及您此次申请的研究项目？

Dr. Gong: I have a very diverse background. After I received my Bachelor of Medicine degree in clinical medicine, I went to work in the rural area for one year. For my Master's degree, I studied genetics with a focus on women's reproductive health. Afterwards, I worked as an obstetrician at a tertiary hospital for 2 years. In 2008 I became a Ph.D. student in social medicine and started to teach in the School of Public Health. Currently I am a lecturer in the Department of Adolescents and Women's Health. The diverse working experience and the broad educational background helped me to be open-minded and interdisciplinary. At the same time, I had to learn many new things. Fortunately I work in a great academic team and they have helped me substantially with professional development. In two years, our team, led by Professor Shuiyuan Xiao, has received a CMB CP grant and three CMB OC grants. These achievements are attributed not only to the team members' hard work, but also to the team members' experience and scientific training accumulated over time.

My OC project is based in Liuyang, with which our team has a long-term collaborative relationship. My research design has also benefited tremendously from the deep knowledge of the operations of local mental health centers. The main purpose of our study is to explore an effective model for the rural area to address mental health problems. We aim to train the village doctors as a supplement to the "686" project, an ongoing government sponsored program focusing on managing severe mental disease, to effectively manage the bi-polar patients in the rural areas.

龚雯洁：我的经历比较复杂，临床医学本科毕业后曾在农村支教一年，硕士专业是遗传学，研究方向为女性生殖卫生，之后做了两年的三甲医院妇产科临床医生，2008 年成为社会医学博士研究生，同时调动至公共卫生学院任教，目前是儿少与妇幼保健学系的讲师。这么多角色和专业的转换，尤其从临床到公卫，给了我相对开阔的视野思路和交叉综合的学术背景，但同时也让我总要重新学习和积累。很幸运的是，我身处非常优秀和团结的学术团队，我的迅速成长与他们的支持和培训密不可分。两年间，我们这个以肖水源教授为首的团队得到了 CMB 的 CP 一项及 OC 三项资助，除了成员的个人努力之外，整个团队长久以来的工作积累和科学训练也起到重要作用。我这次的 OC 项目现场便是团队合作多年的基地：浏阳，研究思路也脱胎于与当地精神卫生部门运作过程和工作模式的长期了解，主要目的是探索一种农村地区的有效模式，通过培训村医，对当地目前正实行的政府项目（重性精神疾病管理治疗项目，也叫“686”项目）起到积极补充作用，更有效地对精神分裂症患者进行病案管理。

Rui: Have you applied for any internationally funded projects before? How do you assess the selection process? What you have learned in this application process that might be useful for your grant-writing?

李蕊：您之前是否申请过其他国际研究项目经费？您如何评价此次选拔的过程？您认为在申请过程中的哪些收获对您今后撰写标书有所帮助？

Dr. Gong: Before applying for the 2012 OC grant, I did not have any experience applying for international grant as a PI. However, I have participated in the application and setting-up of several past CMB projects. Compared with the National Natural Science Foundation grant application, the OC grant application process is more focused on the significance and the feasibility of the project, instead of applicants' background and experience. However the process was very rigorous and it was an extended process. In addition to the content of the project, it is a test of the perseverance and faith of the applicants. It is important to be confident while recognizing the weakness in my application and working hard to address them. Especially in responding to the review comments, it is critical to realize that no PI could ever be the expert in everything from research design to data analysis and to economic evaluation. In order to succeed in the grant application one needs to find support from other experts that addresses precisely the problem at hand.

龚雯洁：在参与 2012 年的 OC 之前，我没有作为 PI 申请过国际项目，但是不同程度地参与了团队成员以往 CMB 项目的申请以及前期开展。相对于国家自然科学基金的申报要求，我觉得 CMB 的 OC 项目筛选更多地把关注点从申报者的资历和学术积累转移到课题本身的现实意义和可行性，但是整个竞争过程非常严格和漫长，除了对研究本身的打磨之外，同时也在考验申请者的毅力和信念。在这个过程中，除了必要的自我肯定之外，承认自己的不足，然后努力弥补这个不足非常重要。尤其在对审稿人的评价做回复的阶段，要认识到没有一个 PI 可以做到每个相关方面的专家，从科研设计到数据统计，包括经济学评估等环节全部完美周全，那么需要寻找相应的支持，而且是真正有针对性的支持，对于申报的成功有至关重要的作用。

Rui: How did you choose the topic?

李蕊：您是如何选择研究课题的？

Dr. Gong: My experience of working in countryside got me interested in rural health. The long-term collaboration between our team and the Liuyang mental health centers helped me understand the role of village doctors in mental health. I also came to understand the issues and needs in implementing the 686 Project. Before the application, I was in charge of the baseline survey for the mental health patients in Liuyang district. The data showed that the proportion of schizophrenic patients who received comprehensive mental health treatment was quite low. So I chose this topic based on the above reasons.

龚雯洁：我在农村支教的经历让我关注到这个有特征性的地域。我们团队与浏阳精神卫生部门多年的合作使得我了解村医这个群体，并熟悉 686 项目执行中的盲点和需求，申报前不久的我负责了一次浏阳地区精神障碍患者的摸底调查，数据体现精神分裂症患者的系统治疗率较低，由此综合考虑，便选择了这个题目。

Rui: What kind of training/guidance/support do you hope the CMB can provide for the applicants in the future?

李蕊：您希望 CMB 今后能够为申请者提供怎样的培训，指导或支持？

Dr. Gong: It might not be realistic to expect CMB to provide centralized training for all applicants on how to prepare for the application as 991 projects did. However, if CMB can provide the full abstracts of funded projects in the past or even 1 to 2 sample grant applications, that will be very helpful for the applicants in terms of understanding the requirements of the OC project and minimizing the confusion in the application process.

龚雯洁：对所有申请者进行 991 项目式的集中培训也许并不现实，但若能为其提供往年成功的完整摘要乃至 1-2 份完整标书，让其更直观地了解 OC 项目的要求和方向，也许能使其在申报过程中不会过于茫然。

Rui: What is your most memorable experience in applying for this OC grant?

李蕊：您认为在此次申请 OC 项目中最难忘的经历是什么？

Dr. Gong: Although not sure if I am the least experienced among all awardees of the OC history, I am certainly the only lecturer among all PIs who have received OC funding at Central South University. This is just to make the point that all junior faculties should feel encouraged to participate in such competitions. Since I am still a junior faculty, I did not have much pressure when I applied for the OC grant. However, even failure appeared likely in the eyes of others, I had to do my best when preparing my application. Because the OC grant application was quite an extended process, it was very stressful for the applicants. The further along you are in the process, the more hope you have, but at the same time, the more stressed you become. It was very important to balance the expectation and the stress.

In the last round, CMB selected 13 applications, but did not provide the ranking of the applications nor the number of the applications that would be awarded the grant. The project officers e-mailed several applicants who were "on the margin". I was one of them. To many applicants, it was perhaps crueler to fail during the last stage than at the beginning. However for me, I focused more on the process rather than the outcome. Although being prepared for the failure, I decided to take the slim odds seriously and spent whole week preparing my responses. At the same time I received full support from my team. We had a group discussion on the review comments. Professor Xiao Shuiyuan and Prof. Zhou Liang provided me with many constructive comments. I prepare very detailed responses to each review comments. For example, when the feasibility of the intervention was challenged, I provided a number of references on the success of similar interventions in the similar population targeted at similar diseases, instead of just putting down "we can try it" or "it should work". One particular experience I want to emphasize is the response to the comment of adding a health economist to the team. As a medical doctor without any health economics training, I am not equipped to respond to the economic evaluation questions in a short period of time. However I could look for a health economist to join the team. I searched in the literature, asked for reference, sent e-mails to experts, and explained my project on the phone. On the last day before the deadline I secured the support from a U.S. based health economist. Although I was not sure how much of the improvement in my project scoring can be attributed to these efforts, I would like to share my experience with everyone. I hope you would benefit from my experience and succeed in your future career.

龚雯洁：我不知道自己是不是 CMB 历史上拿到 OC 的申报者中职称和资历最低浅的，但起码在中南大学历年拿到项目的 PI 中是唯一的讲师。强调这一点只是为了鼓励更多如我一般的青年教师参与到这个领域，也正因为这一点，我在整个申报过程中没有太大的心理压力。但即使失败在旁人看来是理所当然，自己也必须付出全力。尤其 OC 的申报过程非常漫长，从学校限额的竞争到递交摘要争取写完整标书机会，得出初步人选后要求其根据审稿人意见写回复并修改标书……这种逐步地筛选对于申报者绝对是一种煎熬，越到后面付出越多也会寄予更多的希望，这个时候如何平衡自己的期望和压力非常重要。

在最后回复环节，CMB 筛选出 13 位候选人，但并没有公布评委第一轮的打分排名，也没有告知最后的幸运者会有多少位，负责人通过邮件向排名靠后的几位发出了“在边缘地段，希望渺茫”的提示，而我也在其

中。也许对于大多数申请者来说，倒在终点前是比一开始就出局还残忍的结果，但是我觉得起码看到了这一路的风景，所以尽管怀有失败的准备，我依然决定认真站好最后一班岗，专门拿出一周的时间来写回复。同时我们团队也在尽全力地给予我支持，专门召开了针对回复的讨论会，肖水源教授和周亮教授都给予我许多针对性的建议。以这种学习的心态，我针对每一条意见详细解释和回复，尤其当干预方式的可行性被质疑时，我查找了一系列相关文献，用类似的地点、类似的人群、类似的疾病、成功的干预研究报导来说话，而不是简单地回答“应该可以”或者“试试看”。最后要提的是关于卫生经济学家的找寻，作为一个没有受过严格经济学训练的医学研究者，我没有办法靠短时间的自学来回答这个研究中相关的经济学评价问题，但是我认为可以找一个这个领域的专家来帮助我弥补这个缺陷，因此我查找了相关内容的文献，请人推荐作者，写邮件联系，电话解释自己的项目……在截止期的最后一天终于得到了这位美国卫生经济学家的支持。尽管我并不了解自己排名的上升与这些努力之间明确的相关系数，但是我认为，与大家真诚地分享这个过程，也是这次 OC 的终点风景之一，希望更多的人因此走得更远。



## RESEARCH ARTICLE

### Job Satisfaction by Chinese Primary Care Doctors Following Health Care Reform

By Leiyu Shi, DrPH, MBA, MPA, Yang Sun, PhD, Xiaoyu Nie, MSPH, Qingyue Meng, MD, PhD\*

Dr. **Leiyu Shi** is Professor of health policy and health services research from Johns Hopkins University Bloomberg School of Public Health Department of Health Policy and Management. He is also Director of Johns Hopkins Primary Care Policy Center. He received his doctoral education from University of California Berkeley majoring in health policy and services research. He also has a Masters in Business Administration focusing on finance. Dr. Shi's research focuses on primary care, health disparities, and vulnerable populations. He has conducted extensive studies about the association between primary care and health outcomes, particularly on the role of primary care in mediating the adverse impact of income inequality on health outcomes. Dr. Shi is also well known for his extensive research on the nation's vulnerable populations, in particular community health centers that serve vulnerable populations, including their sustainability, provider recruitment and retention experiences, financial performance, experience under managed care, and quality of care. Dr. Shi is the author of nine textbooks and over 150 scientific journal articles.



Leiyu Shi, DrPH, MBA MPA

#### Abstract

The purpose of this study is to compare primary care doctors' job satisfaction and factors associated with it before and after the latest health care reform in China. Data for the study were obtained from China Primary Care Workforce Surveys conducted in 2008 and 2011. Compared to results from the 2008 survey, primary care doctors (PCDs) in the 2011 survey were more satisfied with their jobs overall as well as work conditions and equipment, but less satisfied with their income. In both surveys rural CHC and village clinic doctors were less satisfied than their urban counterparts with their jobs overall, income, work condition, and equipment. Logistic regressions showed that practice setting (i.e. urban, rural, or village) and educational level were two important factors associated with job satisfaction. These findings demonstrated both significant achievements and further efforts to be made to strengthen primary care workforce and enhance their job satisfaction.

**Key Words:** China; healthcare reform; job satisfaction; primary care

#### 摘要

本研究的目的是比较近期中国医改实施前后，基层医疗体系医务人员的工作满意度及其相关因素。本研究的数据来自 2008 年和 2011 年进行的中国基层医疗体系医务人员调查。与 2008 年的调查结果相比，2011 年调查显示基层医疗医务人员（Primary Care Doctors）对工作整体状况以及工作环境和医疗设备满意度提高，然而对收入的满意度降低。对于农村社区卫生服务中心和农村卫生室的医务工作者，工作整体状况、收入、工作环境和医疗设备的满意度比城市义务工作者低。Logistic 回归分析显示，工作所在地（例如：城市、乡镇、村）和受

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教育水平是两个与工作满意度密切相关的重要因素。这些研究结果显示，要加强基层医疗医务工作者队伍并提高他们的工作满意度，还需要取得显著的成果和进一步的努力。

**关键词：**中国，医疗改革，工作满意度，基层医疗

## INTRODUCTION

China has a three-tier health care delivery system, the primary care system at the bottom, secondary hospitals in the middle and tertiary hospitals at the top. These 'grass-root healthcare facilities,' as they are referred to in China, consist of 6,903 urban community health centers (urban CHCs), 25,836 community health stations (branches of urban CHCs), 37,836 township health centers (rural CHCs), and 648,424 village clinics and other primary care facilities.<sup>1</sup> From 2005 to 2010, the number of urban CHCs increased by five-fold, while the number of rural CHCs and village clinics remained stable.<sup>1</sup> The number of staff in primary care system accounted for 40% of total health workforce in China, while the number of primary care doctors (PCDs) accounted for 39.3% of all doctors.<sup>1</sup> In 2010, the primary care system received 3.6 billion or 61.9% of total patient visits.<sup>1</sup>

Over the past two decades, it has been demonstrated that effective primary care can contribute to improved access to healthcare services, enhanced health outcomes, reduced health disparities, and cost effectiveness.<sup>2-5</sup> However, since the early 1980s, sustainability of the primary care system in China has been challenged and a large proportion of primary care providers (PCPs) were ill-qualified.<sup>6-8</sup> At the same time, healthcare costs were skyrocketing while most Chinese were not insured or under-insured, especially in rural areas. The healthcare system was inefficient, ineffective and inequitable.<sup>9</sup>

In 2009, China launched its new health care reform. One of its goals is to rebuild the primary care system and reduce healthcare costs due to overuse of more expensive hospital services.<sup>10</sup> The initial three-year strategy (2009-2011) laid out the plan to strengthen infrastructure of urban and rural CHCs and village clinics as well as to enhance the primary care workforce by providing more training opportunities.<sup>11</sup>

International research has established the links between provider satisfaction and improved performance, enhanced institutional loyalty (e.g. high retention and low attrition), better patient outcomes and higher patient satisfaction.<sup>12-16</sup> Therefore, improving primary care providers' job satisfaction is of great importance to stimulate performance of the primary care system. Chinese researchers have conducted several studies examining Chinese primary care providers' job satisfaction. In 2007, Wang et al. reported that the job satisfaction rate of 180 community health workers in Guangdong was 61.0%.<sup>17</sup> In 2009, Zhou et al. reported that satisfaction rate of community health providers was only 30.6%.<sup>18</sup> In the same year, Xing et al. found that 64.62% of rural health workers reported being satisfied with their work.<sup>19</sup> However, there is generally a lack of studies comparing changes in job satisfaction following the health care reform. Other studies evaluating China's health care reform mainly focused on payment mechanisms and financial incentives for providers.<sup>8,20,21</sup> Few studies explored both financial and non-financial factors.

Because of the essential role of primary care in the health care system and that the quality of primary care is highly associated with providers' satisfaction, it is important to assess and enhance the satisfaction level of primary care providers. Moreover, the current health reform in China also focuses on enhancing primary care performance. Therefore, it is important to evaluate the influence of the reform on the primary care system, including the satisfaction level of the primary care workforce, an indispensable part of the system. The objective of this study is to compare PCDs' satisfaction with both financial and non-financial aspects of work and factors associated with satisfaction before and after China's latest health care reform. We used survey data from two

years, 2008 and 2011, to identify changes following the reform in order to provide an empirical base to further implement and refine the health care reform.

## **METHODS**

### ***Data***

Data for the study were obtained from China Primary Care Workforce Survey conducted in 2008 and 2011. Sponsored by the Ministry of Health, the nationally representative survey provide a comprehensive assessment of 'grass-root' (i.e. community-based) (village, rural township and urban community) PCDs practicing in rural and urban communities.

The surveys employed multi-stage, stratified purposive sampling design in both years to ensure that surveyed samples were representative of community-based primary care workforce nationwide. Regional differences (eastern, central and western China) and variations in socio-economic and health care development were also accounted for in sampling strategy. In the 2008 survey, we first selected three provinces which represented the average-level economic development in China. In the second stage, two rural counties (three in Shandong) and one urban district were selected based on their general representativeness within the province. Lastly, five rural townships (*Xiang*) within each rural county were selected based on their general representativeness within the selected county. The townships' CHCs became the final sampling unit. In the urban setting, the districts' CHCs became the final sampling unit. In addition, five village clinics were randomly selected from each rural township to capture the practice of village doctors (formally labeled 'bare-foot' doctors). The research team then visited the selected CHCs and clinics. All PCDs were invited to participate in the survey. To ensure confidentiality, a self-administered 20-minute questionnaire was used but research staff was available to address any questions by the respondents. No respondent identifier was recorded and no local cadres were allowed to accompany the study team. All eligible PCDs agreed to participate. The final study sample in 2008 consisted of 615 PCDs, 93 in urban CHCs, 248 in rural CHCs, and 274 in village clinics.

A similar sampling strategy was employed in 2011. First, five provinces were selected including the same three provinces selected in 2008, followed by a selection of two rural counties and one urban district within each province. The criteria for selection were also similar to those used for 2008. Next, three rural townships (*Xiang*) were selected based on their general representativeness within the selected county. Finally, urban CHCs, rural CHCs and village clinics were randomly selected in each urban and rural setting, respectively. The same survey process was also followed. The final study sample in 2011 included 453 PCDs, 121 in urban CHCs, 180 in rural CHCs, and 152 in village clinics.

### ***Measures***

The outcome variables in this study represented job satisfaction of PCDs in four aspects, job overall, income, work condition, and equipment. The PCDs surveyed were asked to rate their satisfaction of each measure on a scale. Identical response categories were used on work, income and work condition: very dissatisfied (1), dissatisfied (2), average (3), satisfied (4), and very satisfied (5). For equipment, response categories were dissatisfied (1), average (2), and satisfied (3). Satisfaction was measured by the percent of PCDs who responded average, satisfied or very satisfied.

Covariates were selected based on studies that identified both intrinsic and extrinsic factors determining job satisfaction.<sup>16,22</sup> Intrinsic factors focused on PCDs' individual characteristics including gender, age, education, formal medical education, major and years of medical education. Extrinsic factors focused on practice characteristics such as specialty and years of medical practice. Practice setting (i.e. urban CHC, rural CHC, and village clinics) was also included to account for differences in different settings.

## **Analyses**

The analytic strategy was to compare PCDs' job satisfaction and factors associated with it between 2008 and 2011. Profile of Chinese PCDs was first presented with summary statistics of major individual and practice characteristics by practice setting and year. Differences were assessed by Chi-squared tests for categorical variables and t-tests or ANOVA for continuous variables. In addition, PCDs' main duties and work time composition were presented by showing the average percent of time they spent on each activity. The findings were compared by practice setting based on ANOVA and by year based on t-tests.

Secondly, comparative analyses were conducted focusing on the four measures of satisfaction by practice setting and year. The means and standard deviations of satisfaction ratings as well as proportions of being satisfied (i.e. average or above) with each of the four measures were calculated. Differences were assessed by Chi-squared tests for categorical variables and t-tests or ANOVA for continuous variables.

Lastly, associations between job satisfaction and individual as well as practice factors were examined using logistic regressions, which were conducted in both years and for each of the four satisfaction measures. Associated factors of each measure were compared between the two years.

## **RESULTS**

### ***Changes in Profile and Duties of Chinese Primary Care Doctors***

Table 1 provides the profile of Chinese primary care doctors in 2008 and 2011. Age and gender distributions remained relatively unchanged in the two years. The average age was 40.6, and around 70% of PCDs were males. However, significant differences in other characteristics were observed between the two surveys. Firstly, the average educational level of PCDs in 2011 was significantly higher than that in 2008. More PCDs had bachelor degrees or higher and formal medical training. The average years of medical education were significantly improved from 2.8 in 2008 to 4 years in 2011 ( $p < 0.001$ ). Significant differences were also observed among doctors in urban CHCs, rural CHCs and village clinics, especially in terms of education. Urban CHC PCDs remained the best educated with more getting bachelor degree or higher. The proportion of village doctors receiving formal medical training also increased enormously from 61.3% to 98%.

Table 2 presents the duties and proportions of time devoted to each duty by PCDs. Clinical care accounted for a large proportion of PCDs' time in 2008. However, in 2011 the proportion of time spent on clinical care was decreased, mainly due to reduced proportion of time on diagnosis and treatment and home visits, despite increased time on follow-up. PCDs also spent more time on preventive care, conducting research, administration management and meetings in 2011.

### ***Job Satisfaction by Chinese Primary Care Doctors***

Between 2008 and 2011, overall job satisfaction rate has increased significantly from 83.58% to 92.05% ( $p < 0.001$ ) (table 3). Significant increases in satisfaction with work condition (61.95% vs. 80.13%,  $p < 0.001$ ) and equipment (40.33% vs. 71.52%,  $p < 0.001$ ) were also observed. However, there was a significant decrease in satisfaction with income from 2008 to 2011 (42.6% vs. 31.57%,  $p < 0.001$ ). Figure 1 displays the four measures of satisfaction in a rank-order format across the three types of PCDs surveyed in 2008 and 2011. The satisfaction with work condition, equipment and income all correlated with overall job satisfaction, but the relationships between them were not very strong ( $r = 0.23, 0.34, 0.20$ , respectively,  $p < .001$ ).

In addition to the significant differences observed between the two surveys, there were significant differences among PCDs in urban CHCs, rural CHCs and village clinics. In general, although there were no significant differences in overall job satisfaction among the three, urban CHC PCDs had the highest satisfaction rates with income, work condition and equipment in both years. Compared to village doctors, in 2008, fewer rural CHC PCDs were satisfied with income, but more were satisfied with equipment. However, in 2011, village doctors were less satisfied with income and work condition than rural CHC PCDs.

### ***Factors Associated with Primary Care Doctors' Work Satisfaction***

Table 4 presents the logistic regression results of the individual and practice characteristics associated with PCDs' job satisfaction in 2008 and 2011. In general, practice location and education were two most important factors associated with job satisfaction, especially in 2011.

In 2008, compared to PCDs working in urban CHCs, rural CHC PCDs had significantly lower odds of being satisfied with work overall (OR=0.247,  $p<0.01$ ) and being satisfied with equipment (OR=0.526,  $p<0.05$ ), while village clinic PCDs had reduced odds of being satisfied with equipment (OR=0.353,  $p<0.01$ ). In 2011, PCDs working in both rural CHCs and village clinics had significantly lower odds of being satisfied with work overall (OR=0.286,  $p<0.05$  for rural CHC PCDs; and OR=0.128,  $p<0.01$  for village clinic PCDs) and work condition (OR=0.355,  $p<0.01$  for rural CHC PCDs; and OR=0.283,  $p<0.01$  for village clinic PCDs). In addition, village clinic PCDs were less likely to be satisfied with income than urban CHC PCDs in 2011 (OR=0.364,  $p<0.01$ ).

Furthermore, compared to PCDs with technical school education or lower, PCDs with bachelor degree or higher were less likely to be satisfied with work overall (OR=0.282,  $p<0.05$ ), work condition (OR=0.418,  $p<0.05$ ), and equipment (OR=0.438,  $p<0.05$ ).

## **DISCUSSION**

This study provided comparative information on the profile and job satisfaction of Chinese community-based PCDs in two years before and after the health care reform was enacted. The findings demonstrated both achievements and deficiencies in the primary care system in China, which provided important lessons for further implementing and refining health care reform.

First, the fact that primary care doctors were better educated than before suggests that workforce policies on training and personal development have achieved success. However, the study also indicated that PCDs with bachelor degree or higher were more likely to be dissatisfied in 2011, suggesting that there are still inadequacies in the system to recruit and retain practitioners with higher education.

Secondly, the improvement of satisfaction of physicians, especially the notable improvement in satisfaction among urban CHC doctors with work condition and village doctors with equipment, suggests that resources devoted to infrastructure development were effective in improving community-based healthcare facilities. However, the decline in satisfaction with income, especially among village doctors, also reflects the fact that the income level of PCDs was low and not commensurate with the effort they put in. In fact, in the 2011 survey, we also found significant differences in monthly income among urban CHC PCDs (RMB 2092.5 yuan), rural CHC PCDs (RMB 2046.99 yuan), and village clinic doctors (RMB 1247.13 yuan). To enhance their satisfaction and maintain high morale with patient care, policymakers need to address the income deficiency and at least bring their income to the level of other major professions such as lawyers and business people. An effective performance appraisal system should be developed that ties higher income or bonuses to higher productivity and quality of patient care.

Thirdly, the urban-rural gap in the primary care system was still large despite government's effort in reducing urban-rural disparities. Indeed, prioritizing rural communities should be the next focus of healthcare reform. As our study demonstrated, huge gaps remained between rural and urban PCDs in almost every aspect including infrastructure, PCDs' educational level, and job satisfaction. These could all significantly influence PCDs' performance and quality of care, and affect the overall health care in rural communities. Although it is one of the most difficult tasks in the reform, overcoming rural-urban disparities remains a top concern and requires immediate attention.

Finally, as the major workforce for the Equalization of Essential Public Health Services Program, a major initiative to improve access to public health services nationwide, urban and rural primary care facilities have shifted their focus from clinical care to community-based public health work. However, the increasing work pressure of PCDs must also be recognized and dealt with. Our study showed that PCDs now spent more time on administrative chores and community services. Although community services are important, it nevertheless takes away PCDs' time for patient care. As a result, PCDs tend to rush through their patient care or postpone seeing their patients, leading to access and quality concerns. One policy option is to develop more diversified primary care teams with nurses and public health practitioners responsible for the majority of the community based services. Enhancement in management could also relieve the administrative burden on physicians.

There are, however, limitations in this study. First, this study is a cross-sectional study rather than a cohort study, which dictates that association rather than causal relationship can be studied. Secondly, with only three provinces in 2008 and five in 2011 included in the sampling frame and the purposive sampling method (due to limited number of units included in each stratum) instead of random selection, the representativeness of the study sample and comparability between years could be compromised. However, experts do believe that the selected provinces, counties, districts, and villages were generally representative of the typical economic and health development in the respective locale. In addition, the method of data collection (i.e. self-report) could make some measures less reliable. For example, income and benefits could be under reported while work hours exaggerated. Although independent means of corroborations were unavailable, we are generally confident about the overall reliability of respondents' answers, since the study was anonymous and no local cadres were present during data collection. The high participation rate indicates that respondents were generally interested in the study, and judged by the relatively lower level of satisfaction reported, we do not think respondents were hesitant in reporting what they felt. Finally, this study only examined the situation before 2011. The later implementation of the essential medicine policy and the pay-for-performance system may impose further impact on the primary care system. More follow-up studies need to be conducted.

In conclusion, significant achievements have been made in strengthening primary care workforce in China and enhancing their job satisfaction. However, more work needs to be done in establishing a well-functioning incentive and performance appraisal system, narrowing urban-rural gaps, developing diversified primary care teams, and enhancing management in the primary care system.

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**Table 1. Profile of Chinese Primary Care Doctors**

|                                      | 2008             |                        |                         |                              | 2011             |                         |                         |                              |
|--------------------------------------|------------------|------------------------|-------------------------|------------------------------|------------------|-------------------------|-------------------------|------------------------------|
|                                      | Total<br>(n=615) | Urban<br>CHC<br>(n=93) | Rural<br>CHC<br>(n=248) | Village<br>Clinic<br>(n=274) | Total<br>(n=453) | Urban<br>CHC<br>(n=121) | Rural<br>CHC<br>(n=180) | Village<br>Clinic<br>(n=152) |
| <b>Gender (%)</b>                    |                  |                        |                         |                              |                  |                         |                         |                              |
| Male                                 | 70.1             | 60.2***                | 56.5***                 | 85.8***                      | 66.9             | 48.8***                 | 64.4***                 | 84.2***                      |
| Female                               | 29.9             | 39.8***                | 43.6***                 | 14.2***                      | 33.1             | 51.2***                 | 35.6***                 | 15.8***                      |
| <b>Age</b>                           |                  |                        |                         |                              |                  |                         |                         |                              |
| (mean,SD)                            | 40.6<br>(10.91)  | 43.6***<br>(13.29)     | 36.2***<br>(9.44)       | 43.6***<br>(9.86)            | 40.2<br>(10.42)  | 42.7***<br>(12.96)      | 37.9***<br>(9.29)       | 41.0***<br>(8.79)            |
| <b>Education (%)</b>                 |                  |                        |                         |                              |                  |                         |                         |                              |
| ≤High School                         | 17.6###          | 3.2***                 | 5.2***                  | 33.6***                      | 4.0###           | 2.5***                  | 0.6***                  | 9.2***                       |
| Tech. School                         | 42.4###          | 15.1***                | 37.1***                 | 56.6***                      | 40.4###          | 13.2***                 | 34.4***                 | 69.1***                      |
| Asso. Degree                         | 31.1###          | 57.0***                | 44.8***                 | 9.9***                       | 34.4###          | 37.2***                 | 43.9***                 | 21.1***                      |
| ≥Bachelor                            | 8.9###           | 24.7***                | 12.9***                 | 0.0***                       | 21.2###          | 47.1***                 | 21.1***                 | 0.7***                       |
| <b>Formal Med. Educ. (%)</b>         |                  |                        |                         |                              |                  |                         |                         |                              |
| Yes                                  | 79.7###          | 94.6***                | 94.4***                 | 61.3***                      | 97.6###          | 96.7                    | 97.8                    | 98.0                         |
| No                                   | 20.3###          | 5.4***                 | 5.7***                  | 38.7***                      | 2.4###           | 3.3                     | 2.2                     | 2.0                          |
| <b>Major (%)</b>                     |                  |                        |                         |                              |                  |                         |                         |                              |
| Western                              | 51.6###          | 72.0***                | 68.0***                 | 29.9***                      | 60.3###          | 67.8***                 | 65.6***                 | 48.0***                      |
| Chinese                              | 10.4###          | 11.8***                | 11.3***                 | 9.1***                       | 16.6###          | 16.5***                 | 20.0***                 | 12.5***                      |
| Other                                | 38.0###          | 16.1***                | 20.7***                 | 61.0***                      | 23.2###          | 15.7***                 | 14.4***                 | 39.5***                      |
| <b>Years of Med. Educ. (mean;SD)</b> |                  |                        |                         |                              |                  |                         |                         |                              |
|                                      | 2.8###<br>(1.25) | 3.4***<br>(1.25)       | 3.1***<br>(1.07)        | 2.3***<br>(1.21)             | 4.0###<br>(2.37) | 5.0***<br>(2.85)        | 3.8***<br>(1.68)        | 3.6***<br>(2.46)             |
| <b>Prac. Spec. (%)</b>               |                  |                        |                         |                              |                  |                         |                         |                              |
| Primary Care                         | 73.7###          | 73.1***                | 44.7***                 | 100.0***                     | 66.4###          | 54.6***                 | 45.8***                 | 100.0***                     |
| Surgical                             | 7.0###           | 4.3***                 | 15.9***                 | -                            | 9.3###           | 10.9***                 | 16.2***                 | -                            |
| Obgyn                                | 9.3###           | 4.3***                 | 21.5***                 | -                            | 7.1###           | 6.7***                  | 13.4***                 | -                            |
| Chinese                              | 1.6###           | 4.3***                 | 2.4***                  | -                            | 5.8###           | 7.6***                  | 9.5***                  | -                            |
| Other                                | 8.3###           | 14.0***                | 15.5***                 | -                            | 11.3###          | 20.2***                 | 15.1***                 | -                            |
| <b>Years of Med. Prac. (mean;SD)</b> |                  |                        |                         |                              |                  |                         |                         |                              |
|                                      | 19.5#<br>(11.68) | 22.0***<br>(13.86)     | 14.5***<br>(9.51)       | 23.2***<br>(11.02)           | 18.2#<br>(10.81) | 19.8**<br>(13.42)       | 16.0**<br>(9.74)        | 19.4**<br>(9.24)             |

Between Group: # 0.05≥p≥0.01; ## 0.01>p≥0.001; ### p<0.001 based on  $\chi^2$  test or t-test.

Within Group: \* 0.05≥p≥0.01; \*\* 0.01>p≥0.001; \*\*\* p<0.001 based on  $\chi^2$  test or ANOVA.



**Table 2. Primary Care Doctors' Job Duties (% of time)**

|  | 2008             |                        |                         |                              | 2011             |                         |                         |                              |
|--|------------------|------------------------|-------------------------|------------------------------|------------------|-------------------------|-------------------------|------------------------------|
|  | Total<br>(n=615) | Urban<br>CHC<br>(n=93) | Rural<br>CHC<br>(n=248) | Village<br>Clinic<br>(n=274) | Total<br>(n=453) | Urban<br>CHC<br>(n=121) | Rural<br>CHC<br>(n=180) | Village<br>Clinic<br>(n=152) |
| <b>Clinical Care</b>                     | 62.6###          | 63.7                   | 56.6                    | 67.4                         | 56.3###          | 57.5                    | 53.8                    | 58.2                         |
| Diagnosing & treating                    | 38.2###          | 37.1***                | 33.2***                 | 43.0***                      | 31.6###          | 32.3                    | 30.9                    | 31.8                         |
| Explaining condition & Treatment options | 14.5             | 18.4***                | 16.3***                 | 11.5***                      | 14.1             | 16.4***                 | 15.4***                 | 10.6***                      |
| Home visit                               | 5.7##            | 3.4***                 | 3.1***                  | 8.7***                       | 4.6##            | 3.0***                  | 2.7***                  | 8.1***                       |
| Follow-up (e.g. postpartum visit)        | 4.2###           | 4.8                    | 4.0                     | 4.2                          | 6.1###           | 5.8***                  | 4.8***                  | 7.8***                       |
| <b>Preventive Care</b>                   | 9.2###           | 10.9                   | 8.0                     | 9.7                          | 15.1###          | 15.6                    | 13.4                    | 16.7                         |
| physical exam, evaluation                | 2.7###           | 3.5                    | 2.5                     | 2.7                          | 5.3###           | 6.6                     | 5.0                     | 4.5                          |
| Health education & consultation          | 5.5###           | 6.9*                   | 5.0*                    | 5.5*                         | 7.5###           | 7.5                     | 7.3                     | 7.7                          |
| Immunization                             | 0.9###           | 0.5***                 | 0.5***                  | 1.5***                       | 2.3###           | 1.5***                  | 1.0***                  | 4.5***                       |
| <b>Administration</b>                    | 15.2             | 14.8                   | 22.3                    | 9.0                          | 15.9             | 16.5                    | 20.0                    | 10.6                         |
| Preparing paper work (patient's record)  | 12.8             | 11.5***                | 20.0***                 | 6.8***                       | 12.7             | 13.4***                 | 16.7***                 | 7.4***                       |
| Administration management & meeting      | 2.5#             | 3.3                    | 2.3                     | 2.3                          | 3.2#             | 3.1                     | 3.3                     | 3.2                          |
| <b>Training / Research</b>               | 4.9##            | 5.1                    | 4.5                     | 5.2                          | 6.7##            | 6.5                     | 6.4                     | 7.2                          |
| Training or academic exchange            | 3.5              | 3.9                    | 3.1                     | 3.8                          | 3.8              | 3.3                     | 4.0                     | 4.1                          |
| Research                                 | 1.4###           | 1.1                    | 1.4                     | 1.4                          | 2.8###           | 3.2                     | 2.4                     | 3.1                          |
| <b>Others (e.g. taking a break)</b>      | 8.1##            | 5.6*                   | 8.5*                    | 8.7*                         | 6.1##            | 4.4**                   | 6.4**                   | 7.2**                        |

Between Groups: # 0.05 ≥ P ≥ 0.01; ## 0.01 > P ≥ 0.001; ### P<0.001 based on t-test.

Within Groups: \* 0.05 ≥ P ≥ 0.01; \*\* 0.01 > P ≥ 0.001; \*\*\* P<0.001 based on ANOVA.

**Table 3. Chinese Primary Care Doctors' Job Related Satisfaction**

|                                 | 2008             |                        |                         |                              | 2011             |                         |                         |                              |
|---------------------------------|------------------|------------------------|-------------------------|------------------------------|------------------|-------------------------|-------------------------|------------------------------|
|                                 | Total<br>(n=615) | Urban<br>CHC<br>(n=93) | Rural<br>CHC<br>(n=248) | Village<br>Clinic<br>(n=274) | Total<br>(n=453) | Urban<br>CHC<br>(n=121) | Rural<br>CHC<br>(n=180) | Village<br>Clinic<br>(n=152) |
| <b>Overall Job Satisfaction</b> | 3.28#            | 3.43                   | 3.26                    | 3.26                         | 3.41#            | 3.40                    | 3.46                    | 3.36                         |
| (mean; SD; %Satisfied)          | 1.03             | 0.96                   | 1.02                    | 1.05                         | 0.79             | 0.73                    | 0.78                    | 0.86                         |
|                                 | 83.58%###        | 91.40%                 | 81.85%                  | 82.48%                       | 92.05%###        | 95.87%                  | 91.67%                  | 89.47%                       |
| <b>Income</b>                   | 2.22             | 2.48**                 | 2.11**                  | 2.23**                       | 2.18             | 2.32***                 | 2.31***                 | 1.92***                      |
| (mean; SD; %Satisfied)          | 1.03             | 1.08                   | 1.00                    | 1.01                         | 0.91             | 0.85                    | 0.89                    | 0.92                         |
|                                 | 42.60%###        | 48.39%*                | 36.69%*                 | 45.99%*                      | 31.57%###        | 40.50%***               | 35%***                  | 20.39%***                    |
| <b>Work Cond.</b>               | 2.69###          | 2.98**                 | 2.64**                  | 2.64**                       | 3.13###          | 3.24                    | 3.15                    | 3.01                         |
| (mean; SD; %Satisfied)          | 1.02             | 1.04                   | 0.98                    | 1.03                         | 0.87             | 0.74                    | 0.91                    | 0.92                         |
|                                 | 61.95%###        | 64.52%                 | 58.87%                  | 63.87%                       | 80.13%###        | 89.26%**                | 78.33%**                | 75%**                        |
| <b>Equipment</b>                | 1.42###          | 1.63***                | 1.51***                 | 1.27***                      | 2.05###          | 2.10                    | 2.08                    | 1.97                         |
| (mean; SD; %Satisfied)          | 0.53             | 0.57                   | 0.55                    | 0.45                         | 0.78             | 0.75                    | 0.83                    | 0.76                         |
|                                 | 40.33%###        | 59.14%***              | 48.79%***               | 26.28%***                    | 71.52%###        | 76.86%                  | 69.44%                  | 69.74%                       |

Notes:

**[overall , Income, work condition]:** Satisfaction item is coded as (1) Very Dissatisfied, (2) Dissatisfied, (3) Average, (4) Satisfied, and (5) Very Satisfied.

**[Equipment]:** Satisfaction item is coded as (1) Dissatisfied, (2) Average, (3) Satisfied.

'% satisfied' reflects the % of respondents who were among average, satisfied or very satisfied.

Between Groups: # 0.05≥ P>0.01; ## 0.01≥P >0.001; ### P≤0.001 based on t-test or chi-squared test.

Within Groups: \* 0.05≥ P>0.01; \*\* 0.01≥P >0.001; \*\*\* P≤0.001 based on ANOVA or chi-squared test.

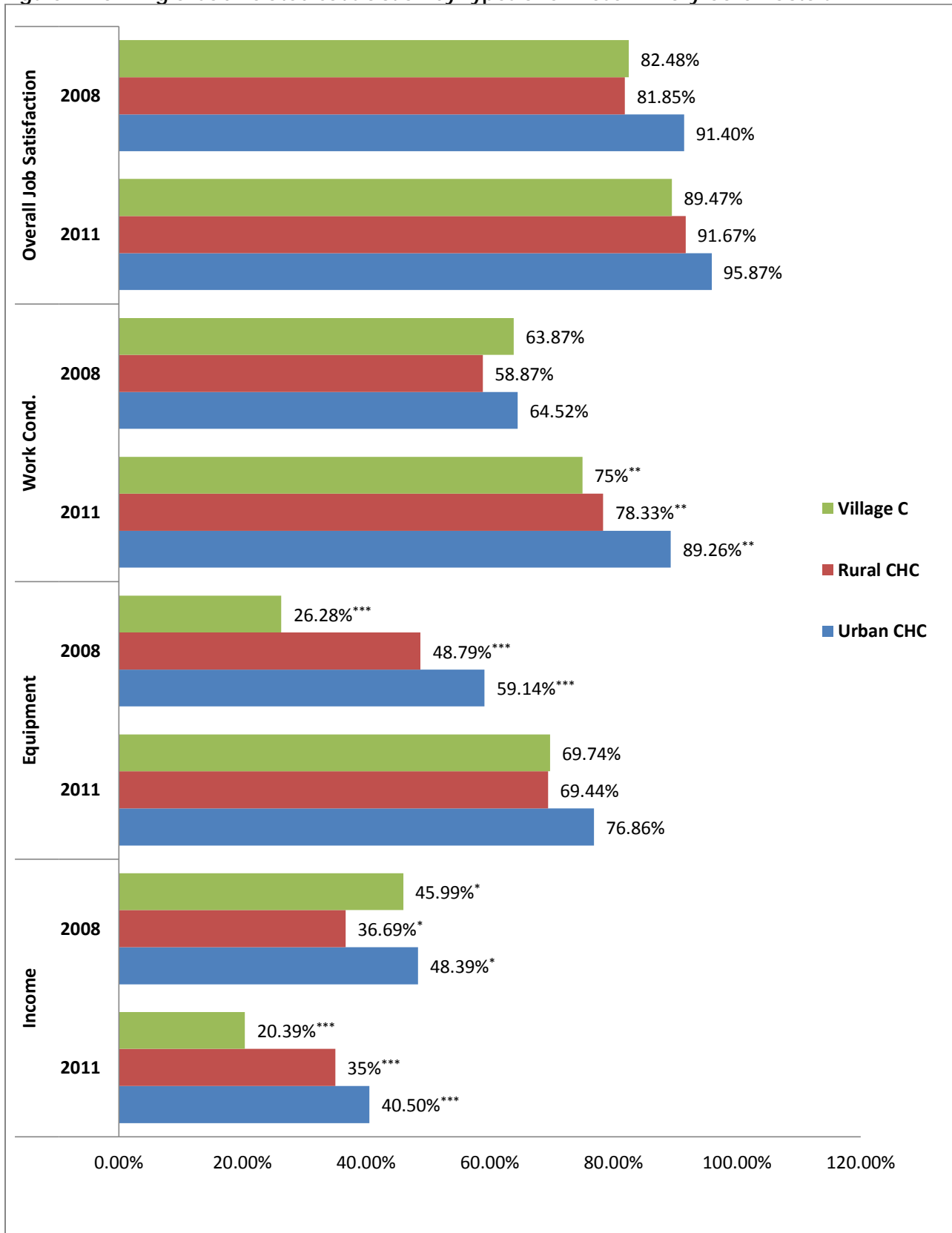
**Table 4. Logistic Regressions on Characteristics Associated with Job Satisfaction**

|                              | Satisfaction with Work    |                          | Satisfaction with Income |                          | Satisfaction with Work Condition |                          | Satisfaction with Equipment |                         |
|------------------------------|---------------------------|--------------------------|--------------------------|--------------------------|----------------------------------|--------------------------|-----------------------------|-------------------------|
|                              | 2008                      | 2011                     | 2008                     | 2011                     | 2008                             | 2011                     | 2008                        | 2011                    |
| <b>Location</b>              |                           |                          |                          |                          |                                  |                          |                             |                         |
| <b>(Odds Ratio;95% C.I.)</b> |                           |                          |                          |                          |                                  |                          |                             |                         |
| Urban CHC (ref)              |                           |                          |                          |                          |                                  |                          |                             |                         |
| Rural CHC                    | 0.247**<br>(0.100, 0.609) | 0.286*<br>(0.088,0.933)  | 0.638<br>(0.370,1.099)   | 0.896<br>(0.512,1.568)   | 0.888<br>(0.513,1.539)           | 0.355**<br>(0.164,0.770) | 0.526*<br>(0.303,0.911)     | 0.55<br>(0.296,1.022)   |
| Village Clinic               | 0.366<br>(0.131, 1.023)   | 0.128**<br>(0.029,0.568) | 1.215<br>(0.636,2.322)   | 0.364**<br>(0.174,0.762) | 1.303<br>(0.673,2.523)           | 0.283**<br>(0.110,0.730) | 0.353**<br>(0.183,0.681)    | 0.555<br>(0.254,1.213)  |
| <b>Gender</b>                |                           |                          |                          |                          |                                  |                          |                             |                         |
| Male (ref)                   |                           |                          |                          |                          |                                  |                          |                             |                         |
| Female                       | 1.371<br>(0.793, 2.372)   | 0.946<br>(0.420,2.130)   | 1.234<br>(0.838,1.819)   | 1.585*<br>(1.003,2.505)  | 1.461<br>(0.983,2.171)           | 1.495<br>(0.839,2.663)   | 1.3<br>(0.880,1.920)        | 1.217<br>(0.748,1.983)  |
| <b>Age</b>                   | 1.054<br>(0.962, 1.155)   | 1.042<br>(0.920,1.181)   | 1.12**<br>(1.048,1.197)  | 1.005<br>(0.940,1.074)   | 1.081<br>(1.010,1.157)           | 0.975<br>(0.901,1.056)   | 1.005<br>(0.939,1.075)      | 1.027<br>(0.956,1.103)  |
| <b>Education</b>             |                           |                          |                          |                          |                                  |                          |                             |                         |
| ≤Technical School (ref)      |                           |                          |                          |                          |                                  |                          |                             |                         |
| Associate Degree             | 0.596<br>(0.322, 1.104)   | 0.601<br>(0.235,1.534)   | 1.263<br>(0.805,1.981)   | 0.81<br>(0.471,1.391)    | 1.42<br>(0.904,2.230)            | 0.771<br>(0.414,1.438)   | 1.332<br>(0.851,2.086)      | 0.986<br>(0.563,1.726)  |
| ≥Bachelor Degree             | 0.469<br>(0.186, 1.179)   | 0.282*<br>(0.083,0.957)  | 0.994<br>(0.484,2.044)   | 0.503<br>(0.250,1.012)   | 1.115<br>(0.556,2.233)           | 0.418*<br>(0.181,0.962)  | 0.967<br>(0.482,1.940)      | 0.438*<br>(0.213,0.904) |
| <b>Formal Med. Educ.</b>     |                           |                          |                          |                          |                                  |                          |                             |                         |
| Yes                          | 1.194                     | 2.364                    | 1.205                    | 0.514                    | 1.115                            | 1                        | 1.098                       | 1.586                   |

|                            |                          |                          |                           |                         |                         |                         |                          |                         |
|----------------------------|--------------------------|--------------------------|---------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
|                            | (0.623, 2.289)           | (0.250, 22.395)          | (0.730, 1.990)            | (0.134, 1.977)          | (0.665, 1.869)          | (-, -)                  | (0.631, 1.910)           | (0.375, 6.700)          |
| No (ref)                   |                          |                          |                           |                         |                         |                         |                          |                         |
| <b>Major</b>               |                          |                          |                           |                         |                         |                         |                          |                         |
| Western (ref)              |                          |                          |                           |                         |                         |                         |                          |                         |
| Chinese                    | 0.994<br>(0.444, 2.224)  | 0.609<br>(0.225, 1.649)  | 0.954<br>(0.520, 1.749)   | 0.991<br>(0.489, 2.006) | 1.011<br>(0.552, 1.852) | 0.788<br>(0.373, 1.664) | 1.133<br>(0.610, 2.104)  | 1.659<br>(0.781, 3.526) |
| Other                      | 0.841<br>(0.492, 1.437)  | 1.949<br>(0.680, 5.588)  | 1.151<br>(0.773, 1.713)   | 0.935<br>(0.537, 1.629) | 1.045<br>(0.698, 1.564) | 1.032<br>(0.559, 1.903) | 0.982<br>(0.648, 1.489)  | 1.468<br>(0.846, 2.547) |
| <b>Years of Med. Educ.</b> | 0.889<br>(0.724, 1.092)  | 0.937<br>(0.813, 1.080)  | 0.928<br>(0.788, 1.094)   | 1.064<br>(0.972, 1.164) | 0.905<br>(0.766, 1.069) | 1.051<br>(0.917, 1.204) | 0.984<br>(0.827, 1.170)  | 1.056<br>(0.942, 1.182) |
| <b>Practice Specialty</b>  |                          |                          |                           |                         |                         |                         |                          |                         |
| Primary Care (ref)         |                          |                          |                           |                         |                         |                         |                          |                         |
| Chinese                    | 1<br>(-, -)              | 2.558<br>(0.239, 27.383) | 2.224<br>(0.535, 9.246)   | 0.89<br>(0.293, 2.706)  | 1.255<br>(0.284, 5.549) | 6.16<br>(0.707, 53.702) | 1.84<br>(0.439, 7.720)   | 2.146<br>(0.504, 9.129) |
| Other                      | 1.158<br>(0.606, 2.210)  | 0.677<br>(0.255, 1.800)  | 1.376<br>(0.842, 2.247)   | 1.005<br>(0.593, 1.702) | 1.104<br>(0.682, 1.786) | 1.013<br>(0.528, 1.944) | 1.705*<br>(1.056, 2.753) | 1.339<br>(0.761, 2.355) |
| <b>Years of Med. Prac.</b> | 0.917*<br>(0.842, 0.999) | 0.937<br>(0.832, 1.055)  | 0.912**<br>(0.857, 0.971) | 1.024<br>(0.961, 1.092) | 0.944<br>(0.886, 1.006) | 1.012<br>(0.938, 1.091) | 0.986<br>(0.924, 1.052)  | 0.973<br>(0.908, 1.042) |

\*p<0.05; \*\*p<0.01

Figure 1. Ranking of Job Related Satisfaction by Types of Chinese Primary Care Doctors



Between Groups: # 0.05 ≥ P > 0.01; ## 0.01 ≥ P > 0.001; ### P ≤ 0.001 based on t-test.  
 Within Groups: \* 0.05 ≥ P > 0.01; \*\* 0.01 ≥ P > 0.001; \*\*\* P ≤ 0.001 based

## RESEARCH TWITTER

Shua J. Chai, Feng Tan, Yongcai Ji, Xiaomin Wei, Richun Li, and Melinda Frost. **"Community-Level Text Messaging for 2009 H1N1 Prevention in China."** *American Journal of Preventive Medicine*, 2013, 45: 190-6.

This study aims to determine the effectiveness of mobile phone text messaging (SMS) in improving 2009 H1N1 knowledge, attitudes, behaviors, and self-reported outcomes and to assess community SMS acceptability. A program evaluation of Shanghai, China's SMS system using a single-blinded, randomized-controlled method was conducted in 2010. Randomly selected community residents who agreed to participate were assigned to receive 3 weeks of either 2009 H1N1 prevention and control or tobacco-cessation messages. It finds that of 1992 respondents, those receiving 2009 H1N1 messages had higher scores measuring 2009 H1N1 knowledge and desired attitudes ( $p < 0.001$ ); 1.77 times greater odds of new 2009 H1N1 vaccination ( $p < 0.001$ ); and 0.12 times smaller odds of reporting influenza-like illness ( $p < 0.001$ ) than those receiving tobacco messages. This study concludes that SMS can improve self-reported uptake of short-term behaviors, such as vaccination, that can result in long-term prevention and control of disease. SMS can improve knowledge and influence attitudes about infection prevention and control and self-reported health outcomes.

Xian Qi, Yan-Hua Qian, Chang-Jun Bao, Xi-Ling Guo, Lun-Biao Cui, Fen-Yang Tang, Hong Ji, Yong Huang, Pei-Quan Cai, Bing Lu, Ke Xu, Chao Shi, Feng-Cai Zhu, Ming Hao Zhou, and Hua Wang. **"Probable person to person transmission of novel avian influenza A (H7N9) virus in Eastern China, 2013: epidemiological investigation."** *BMJ*, 2013, 347 doi: <http://dx.doi.org/10.1136/bmj.f4752>.

This study aimed to determine whether the novel avian influenza H7N9 virus can transmit from person to person and its efficiency. Samples from the two patients with avian H7N9 in Wuxi, China in March 2013 and environments were collected and tested by real time reverse transcriptase-polymerase chain reaction (rRT-PCR), viral culture, and haemagglutination inhibition assay. The index patient became ill five to six days after his last exposure to poultry. The second patient, his daughter aged 32, who provided unprotected bedside care in the hospital, had no known exposure to poultry. She developed symptoms six days after her last contact with her father. Two strains were isolated successfully from the two patients. Genome sequence and analyses of phylogenetic trees showed that both viruses were almost genetically identical. Forty three close contacts of both patients were identified. One had mild illness but had negative results for avian H7N9 by rRT-PCR. All 43 close contacts tested negative for haemagglutination inhibition antibodies specific for avian H7N9. This study concluded that the infection of the daughter probably resulted from contact with her father (the index patient) during unprotected exposure, suggesting that in this cluster the virus was able to transmit from person to person. The transmissibility was limited and non-sustainable.

Xiuxiu Zhao, Ping Yang, Ruoyan Gai, Lin Mei, Xingzhou Wang, and Lingzhong Xu. **"Determinants of health care-seeking delay among tuberculosis patients in Shandong Province, China."** *European Journal of Public Health*, Advance Access, 10.1093/eurpub/ckt113.

This study aimed to understand the situation of initial health care-seeking delay among tuberculosis patients in eastern China, and explore its influencing factors, to provide a basis for formulating related policies and reducing its transmission. A cross-sectional survey was conducted in six counties of Shandong Province, China and the study sites were selected by multi-stage random sampling. Subjects were pulmonary tuberculosis patients registered with the county tuberculosis dispensaries at study sites that completed treatment during the period October 2006 to September 30, 2007. For the 819 cases of pulmonary tuberculosis, the median initial health care-seeking delay time was 6 days, and 49.8% of them were initial health care-seeking delayed. The logistic regression analysis showed that marriage (odds ratio = 0.354, 95% CI: 0.193–0.650) and knowledge of the national

tuberculosis subsidy policy (odds ratio = 1.753, 95% CI: 1.258–2.441) were associated with initial health care-seeking delay. This study concluded that changing the perception of patients and popularizing the national tuberculosis subsidy policy would do well towards reducing initial health care-seeking delay.

Zhiyuan Hou, Ellen Van de Poel, Eddy Van Doorslaer, Baorong Yu, and Qingyue Meng. **Effects of NCMS on access to care and financial protection in China.** *Health Economics*, Early View, DOI: 10.1002/hec.2965.

The introduction of the New Cooperative Medical Scheme (NCMS) in rural China has been the most rapid and dramatic extension of health insurance coverage in the developing world in this millennium. The literature to date has mainly used the uneven rollout of NCMS across counties as a way of identifying its effects on access to care and financial protection. This study exploits the cross-county variation in NCMS generosity in 2006 and 2008 in the Ningxia and Shandong provinces to estimate the effect of coverage generosity on utilization and financial protection. The results confirm earlier findings of NCMS being effective in increasing access to care but not in increasing financial protection. In addition, this study finds NCMS enrollees to be sensitive to the price incentives set in the NCMS design when choosing their provider and providers to respond by increasing prices and/or providing more expensive care.

Lindsay M Jaacks, Penny Gordon-Larsen, Elizabeth J Mayer-Davis, Linda S Adair, and Barry Popkin. **“Age, Period and Cohort Effects on Adult Body Mass Index and Overweight from 1991 to 2009 in China: the China Health and Nutrition Survey.”** *International Journal of Epidemiology*, 2013, 42: 828-37.

The authors collected data from the China Health and Nutrition Survey from 1991 to 2009 which included 53,298 observations from 18,059 participants across nine provinces in China. They used mixed effects models to explicitly assess differences in body mass index (BMI) within individuals over time (age effect) and population-wide differences in BMI over time (period effect), and implicitly assess differences in the experienced period effect across individuals of varying ages (cohort effect). Stronger period effects on BMI and overweight were observed among males compared with females; and younger cohorts had higher BMIs compared with older cohorts. The authors concluded that although period effects had a stronger influence on the BMI of males, interventions should not overlook younger female cohorts who are at increased risk compared with their older counterparts.

Jiu-Yao Wang, Li-Fan Liu, Chuan-Yu Chen, Ya-Wen Huang, Chao A Hsiung, and Hui-Ju Tsai. **“Acetaminophen and/or antibiotic use in early life and the development of childhood allergic diseases.”** *International Journal of Epidemiology*, 2013, 42: 1087-99.

The authors conducted a prospective birth cohort study of 263,620 children born in 1998 and 9,910 children born in 2003, separately, from the National Health Insurance Research Database (NHIRD) in Taiwan. Exposure status of acetaminophen and/or antibiotics and potential confounding factors were included in the analyses. Cox proportional hazards models were applied to determine the temporal relationship between acetaminophen and/or antibiotic exposure and the development of allergic diseases. They observed a positive relationship between acetaminophen and/or antibiotic exposure during the 1st year of life and the subsequent development of the three examined allergic diseases (atopic dermatitis, asthma and allergic rhinitis) in the 1998 birth cohort, but the observed relationship of drug exposure in the 2003 cohort, especially for atopic dermatitis and asthma, was lower than for those in the 1998 cohort and was not statistically significant. The authors concluded that the temporal effect of exposure to acetaminophen and/or antibiotics influences the development of common allergic diseases in later childhood.

Zhongliang Zhou, Yanfang Su, Jianmin Gao, Benjamin Campbell, Zhengwei Zhu, Ling Xu, Yaoguang Zhang. **"Assessing equity of healthcare utilization in rural China: results from nationally representative surveys from 1993 to 2008."** *International Journal for Equity in Health*, 2013, 12:34.

The authors estimated need-predicted healthcare utilization of outpatient and inpatient services using the National Health Service Survey (NHSS) in 1993, 1998, 2003, and 2008. Need-standardized healthcare utilization is assessed through indirect standardization method. Concentration index is measured to reflect income-related inequity of healthcare utilization. They found that the concentration index of need-standardized outpatient utilization is 0.0486[95% CI (0.0399, 0.0574)], 0.0310[95% CI (0.0229, 0.0390)], 0.0167[95% CI (0.0069, 0.0264)] and -0.0108 [95% CI (-0.0213, -0.0004)] in 1993, 1998, 2003 and 2008, respectively. For inpatient service, the concentration index is 0.0529[95% CI (0.0349, 0.0709)], 0.1543[95% CI (0.1356, 0.1730)], 0.2325[95% CI (0.2132, 0.2518)] and 0.1313[95% CI (0.1174, 0.1451)] in 1993, 1998, 2003 and 2008, respectively. The authors concluded that utilization of both outpatient and inpatient services was pro-rich in rural China with the exception of outpatient service in 2008. With the same needs for healthcare, rich rural residents utilized more healthcare service than poor rural residents. Compared to utilization of outpatient service, utilization of inpatient service was more inequitable. Inequity of utilization of outpatient service reduced gradually from 1993 to 2008; meanwhile, inequity of inpatient service utilization increased dramatically from 1993 to 2003 and decreased significantly from 2003 to 2008.

Yu Xu, Limin Wang, Jiang He, Yufang Bi, Mian Li, Tiange Wang, Linhong Wang, Yong Jiang, Meng Dai, Jieli Lu, Min Xu, Yichong Li, Nan Hu, Jianhong Li, Shengquan Mi, Chung-Shiuan Chen, Guangwei Li, Yiming Mu, Jiajun Zhao, Lingzhi Kong, Jialun Chen, Shenghan Lai, Weiqing Wang, Wenhua Zhao, and Guang Ning. **"Prevalence and Control of Diabetes in Chinese Adults."** *JAMA*, 2013, 310: 948-959.

The authors conducted a cross-sectional survey in a nationally representative sample of 98,658 Chinese adults in 2010 using a complex, multistage, probability sampling design. Plasma glucose and hemoglobin A1c levels were measured after at least a 10-hour overnight fast among all study participants, and a 2-hour oral glucose tolerance test was conducted among participants without a self-reported history of diagnosed diabetes. They estimated that the overall prevalence of diabetes was 11.6% (95% CI, 11.3%-11.8%) in the Chinese adult population. The prevalence among men was 12.1% (95% CI, 11.7%-12.5%) and among women was 11.0% (95% CI, 10.7%-11.4%). The prevalence of previously diagnosed diabetes was estimated to be 3.5% (95% CI, 3.4%-3.6%) in the Chinese population: 3.6% (95% CI, 3.4%-3.8%) in men and 3.4% (95% CI, 3.2%-3.5%) in women. The prevalence of undiagnosed diabetes was 8.1% (95% CI, 7.9%-8.3%) in the Chinese population: 8.5% (95% CI, 8.2%-8.8%) in men and 7.7% (95% CI, 7.4%-8.0%) in women. In addition, the prevalence of prediabetes was estimated to be 50.1% (95% CI, 49.7%-50.6%) in Chinese adults: 52.1% (95% CI, 51.5%-52.7%) in men and 48.1% (95% CI, 47.6%-48.7%) in women. The prevalence of diabetes was higher in older age groups, in urban residents, and in persons living in economically developed regions. Among patients with diabetes, only 25.8% (95% CI, 24.9%-26.8%) received treatment for diabetes, and only 39.7% (95% CI, 37.6%-41.8%) of those treated had adequate glycemic control. The authors projected that there were up to 113.9 million Chinese adults with diabetes and 493.4 million with prediabetes. These findings indicate the importance of diabetes as a public health problem in China.

Gonghuan Yang, Yu Wang, Yixin Zeng, George F Gao, Xiaofeng Liang, Maigeng Zhou, Xia Wan, Shicheng Yu, Yuhong Jiang, Mohsen Naghavi, Theo Vos, Haidong Wang, Alan D Lopez, and Christopher JL Murray. **"Rapid health transition in China, 1990–2010: findings from the Global Burden of Disease Study 2010."** *The Lancet*, 2013, 381:1987-2015.

The authors used results of the Global Burden of Diseases, Injuries, and Risk Factors Study 2010 (GBD 2010) for 1990 and 2010 for China and 18 other countries in the G20 to assess rates and trends in mortality, causes of death, years of life lost (YLLs), years lived with disability (YLDs), disability-adjusted



life-years (DALYs), and healthy life expectancy (HALE). They presented results for 231 diseases and injuries and for 67 risk factors or clusters of risk factors relevant to China and assessed relative performance of China against G20 countries. They found that the leading causes of death in China in 2010 were stroke (1.7 million deaths, 95% uncertainty intervals (UI) 1.5 – 1.8 million), ischaemic heart disease (948,700 deaths, 774, 500 – 1,024,600), and chronic obstructive pulmonary disease (934,000 deaths, 846,600 – 1,032,300). Age-standardised YLLs in China were lower in 2010 than all emerging economies in the G20, and only slightly higher than noted in the USA. China had the lowest age-standardised YLD rate in the G20 in 2010. China also ranked tenth (95% UI eighth to tenth) for HALE and 12th (11th to 13th) for life expectancy. YLLs from neonatal causes, infectious diseases, and injuries in children declined substantially between 1990 and 2010. Mental and behavioural disorders, substance use disorders, and musculoskeletal disorders were responsible for almost half of all YLDs. The fraction of DALYs from YLDs rose from 28.1% (95% UI 24.2—32.5) in 1990 to 39.4% (34.9—43.8) in 2010. Leading causes of DALYs in 2010 were cardiovascular diseases (stroke and ischaemic heart disease), cancers (lung and liver cancer), low back pain, and depression. Dietary risk factors, high blood pressure, and tobacco exposure are the risk factors that constituted the largest number of attributable DALYs in China. Ambient air pollution ranked fourth (third to fifth; the second highest in the G20) and household air pollution ranked fifth (fourth to sixth; the third highest in the G20) in terms of the age-standardised DALY rate in 2010.

Kit Yee Chan, Wei Wang, Jing Jing Wu, Li Liu, Evropi Theodoratou, Josip Car, Lefkos Middleton, Tom C Russ, Ian J Deary, Harry Campbell, Wei Wang, and Igor Rudan. **"Epidemiology of Alzheimer's disease and other forms of dementia in China, 1990–2010: a systematic review and analysis."** *The Lancet*, 2013, 381: 2016-23.

The authors searched for reports of Alzheimer's disease or dementia in China, published in Chinese and English between 1990 and 2010 from the databases of National Knowledge Infrastructure, Wanfang, and PubMed. They found 12 642 reports, of which 89 met the inclusion criteria (75 assessed prevalence, 13 incidence, and nine mortality). In total, the included studies had 340,247 participants, in which 6357 cases of Alzheimer's disease were recorded. 254,367 people were assessed for other forms of dementia, of whom 3,543 had vascular dementia, frontotemporal dementia, or Lewy body dementia. In 1990 the prevalence of all forms of dementia was 1.8% (95% CI 0.0 – 44.4) at 65 – 69 years, and 42.1% (0.0 – 88.9) at age 95 – 99 years. In 2010 prevalence was 2.6% (0.0 – 28.2) at age 65 – 69 years and 60.5% (39.7 – 81.3) at age 95 – 99 years. The number of people with dementia in China was 3.68 million (95% CI 2.22 – 5.14) in 1990, 5.62 million (4.42 – 6.82) in 2000, and 9.19 million (5.92 – 12.48) in 2010. In the same period, the number of people with Alzheimer's disease was 1.93 million (1.15 – 2.71) in 1990, 3.71 million (2.84 – 4.58) people in 2000, and 5.69 million (3.85 – 7.53) in 2010. The incidence of dementia was 9.87 cases per 1000 person-years, that of Alzheimer's disease was 6.25 cases per 1000 person-years, that of vascular dementia was 2.42 cases per 1000 person-years, and that of other rare forms of dementia was 0.46 cases per 1000 person-years. They retrieved mortality data for 1,032 people with dementia and 20,157 healthy controls, who were followed up for 3 – 7 years. The median standardised mortality ratio was 1.94:1 (IQR 1.74 – 2.45). The authors concluded that the burden of dementia seems to be increasing faster than is generally assumed by the international health community. Rapid and effective government responses are needed to tackle dementia in low-income and middle-income countries.

Feng-Cai Zhu, Fan-Yue Meng, Jing-Xin Li, Xiu-Ling Li, Qun-Ying Mao, Hong Tao, Yun-Tao Zhang, Xin Yao, Kai Chu, Qing-Hua Chen, Yue-Mei Hu, Xing Wu, Pei Liu, Lin-Yang Zhu, Fan Gao, Hui Jin, Yi-Juan Chen, Yu-Ying Dong, Yong-Chun Liang, Nian-Min Shi, Heng-Ming Ge, Lin Liu, Sheng-Gen Chen, Xing Ai, Zhen-Yu Zhang, Yu-Guo Ji, Feng-Ji Luo, Xiao-Qin Chen, Ya Zhang, Li-Wen Zhu, Zheng-Lun Liang, and Xin-Liang Shen. **"Efficacy, safety, and immunology of an inactivated alum-adjuvant enterovirus 71 vaccine in children in China: a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial."** *The Lancet*, 2013, 381: 2024-32.

The authors assessed the efficacy, safety, immunogenicity, antibody persistence, and immunological correlates of an inactivated alum-adjuvant enterovirus 71 (EV71) vaccine. They did a randomised, double-blind, placebo-controlled, phase 3 trial. Healthy children aged 6—35 months from four centres in China were randomly assigned (1:1) to receive vaccine or alum-adjuvant placebo at day 0 and 28, according to a randomisation list (block size 30) generated by an independent statistician. Investigators and participants and their guardians were masked to the assignment. Primary endpoints were EV71-associated hand, foot, and mouth disease (HFMD) and EV71-associated disease during the surveillance period from day 56 to month 14, analysed in the per-protocol population. 10,245 participants were enrolled and assigned: 5,120 to vaccine versus 5,125 to placebo. 4,907 (with three cases of EV71-associated HFMD and eight cases of EV71-associated disease) versus 4,939 (with 30 cases of EV71-associated HFMD and 41 cases of EV71-associated disease) were included in the primary efficacy analysis. Vaccine efficacy was 90.0% (95% CI 67.1 – 96.9) against EV71-associated HFMD ( $p=0.0001$ ) and 80.4% (95% CI 58.2 – 90.8) against EV71-associated disease ( $p<0.0001$ ). Serious adverse events were reported by 62 of 5,117 (1.2%) participants in the vaccine group versus 75 of 5,123 (1.5%) in the placebo group ( $p=0.27$ ). Adverse events occurred in 3,644 (71.2%) versus 3,603 (70.3%;  $p=0.33$ ). The authors believe that EV71 vaccine provides high efficacy, satisfactory safety, and sustained immunogenicity.

## POLICY AND PRACTICE UPDATES

### 医保异地结算要破除地方抵制

《华夏时报》2013-08-02

<http://finance.sina.com.cn/roll/20130731/233116304711.shtml>

国务院办公厅在中国政府网发布《深化医药卫生体制改革 2013 年主要工作安排》的通知，对 2013 年医药卫生体制改革的各项工作进行了安排，其中最令人关注的异地就医医保报销问题，获得专门阐述。通知要求，由人社部、国家卫生计生委分别负责，总结实践经验，大力推进异地就医结算，逐步推开省内异地就医直接结算。选择在部分省份试点，探索建立跨省异地就医即时结算机制。

对于那些缺乏优质医疗资源的居民来说，异地医保报销就是一个非常重要的问题，因为几乎所有的大病都需要到其他城市治疗。媒体曾统计过，在北京市三级医院里，有 30%-40% 的患者来自外地，专科医院的这一比例接近 80%-90%，其中住院患者的比例还要高一些。异地医保报销问题同时还困扰着那些在外地就业的居民。自从 2006 年开始实行农民工大病医疗保险专项行动以来，农民工也出现了异地医保报销问题：当年全国就有 2600 多万农民工参加了大病医保，但是这些农民工的工作地却不确定，因此报销也成为问题。画地为牢的社会保障体系是最大的问题。发源于传统计划体制下的现代社会保障制度，本质上是忽视劳动力的自由流动，因此所有的社会保障体系都是属地管理——目前的社会保障系统筹层级太低，到目前为止有很多省份的统筹层级还是在地市级，尽管有些省份已经统筹到省一级，但是这与人口在全国范围内流动的现实却有着巨大反差。为此，要在根子上解决医保的异地结算难题，必须要提高统筹层级，才能抵消地方可能出现的抵制，这也是国务院此次文件所逐步推行的政策。

### Reducing local resistance to remote health insurance settlement

The State Council of China posted a notice on the government website regarding the main areas of work needed in 2013 to deepen the Health System Reform. One of the main issues being discussed was health insurance reimbursement when the insured sought medical treatment outside his or her jurisdiction.

For many people living in areas without quality medical resources, they have to seek medical treatment in other cities or jurisdictions for all serious illnesses, and being able to file for health insurance outside your jurisdiction becomes very important. According to some news media survey, about 30% to 40% of patients in Beijing tertiary hospitals come from outside the city. This percentage increases to about 80% to 90% for specialized hospitals. People working outside their jurisdictions also have difficulties in medical care reimbursement.

China's current social safety net system is based on the traditional planned economic system that lacks enough flexibility for the free movement of labor. Currently, most provinces coordinate their social safety net at the local municipal level, in stark contrast to the national movement of labor force. In order to resolve the issues involved in remotely reimbursing health insurance claims, it is important to coordinate the reimbursing of the benefits at much higher levels.

### 医改办启动首批县级公立医院改革试点自评工作

《中国政府网》2013-08-06

[http://www.gov.cn/gzdt/2013-08/06/content\\_2462067.htm](http://www.gov.cn/gzdt/2013-08/06/content_2462067.htm)

为全面总结县级公立医院综合改革试点的做法和进展，发现制约改革深化的主要因素，完善相关政策，制订拓展和深化改革的政策文件，国务院医改领导小组办公室近日印发通知，启动县级公立医院综合改革试点评估工作。

第一阶段评估工作为地方自评，8月20日前完成。要求各地全面总结县级公立医院综合改革试点的做法，评价各级政府和试点县级医院对政策措施的落实情况；评估改革试点取得的成效，总结值得推广的经验；发现和归纳当前改革试点遇到的困难和问题，提出拓展和深化改革的政策建议。

自评的内容为：全面总结各地县级公立医院综合改革试点的做法，评价各级政府和试点县级医院对政策措施的落实情况；评估改革试点取得的成效，总结值得推广的经验；发现和归纳当前改革试点遇到的困难和问题，提出拓展和深化改革的政策建议。

自评的要求为：（一）深刻认识开展县级公立医院综合改革试点评估工作的重要意义，做好地方自评的组织推进工作；（二）确保自评结果的客观真实性。接受自评的单位和人员要如实填报数据，反映真实情况，开展测算要严谨客观，严禁弄虚作假和篡改调查结果；（三）按时完成自评任务。

各省（区、市）接到通知后即开展自评工作，8月20日下班前将所有需要收集的材料（电子版）按要求提交至国务院医改办；8月25日下班前将自评报告（电子版）报送国务院医改办。

### **Office of Medical Care Reform Initiates the First Round of Self-Evaluation by County-Level Public Hospitals**

The State Council Health Reform Leading Group Office recently announced the initiation of evaluation of county level public hospitals involved in the medical reform piloting program. This round of evaluation aims to comprehensively review the methods used and progress made for the pilot county-level hospital reform, discover major factors that impede deepening of the reform, improve reform-related policies, and develop policies for further broadening and deepening the reform.

The first segment of the evaluation will be local self-assessment to be completed by August 20. All local authorities need to comprehensively review methods used in the county-level public hospital reform and evaluate implementation of related policies by the piloting hospitals and all levels of government. It is important to understand the impact of reform at the piloting hospitals as well as problems and difficulties faced by the reform. From these evaluations, valuable lessons and suggestions will be summarized and disseminated to further the medical care reform.

#### **广州启动县级医院改革试点**

《第一财经日报》2013-08-06

<http://www.yicai.com/news/2013/08/2916505.html>

广州市政府常务会议审议通过了《广州市县级公立医院医药价格改革试点工作方案（试行）》（下称《方案》），确定在广州从化、增城两个县级市开展县级公立医院改革。《方案》明确，县级公立医院综合改革以破除“以药补医”机制为关键环节，以改革补偿机制为切入点。县级公立医院医药价格改革就是通过取消药品加成政策，将县级医院补偿由服务收费、药品加成收入和政府补助三个渠道改为服务收费和政府补助两个渠道。医院由此减少的合理收入，通过调整医疗技术服务价格和增加政府投入等途径予以补偿。

《方案》主要内容包括，试点医院药品（中药饮片、制剂除外）面向所有患者实行零差率销售；降低磁共振扫描（MRI）、X 计算机体层（CT）扫描价格，在现行政府指导价基础上降低 8%；合理提高体现医务人员技术劳务价值的诊查、护理、手术以及治疗等医疗服务项目价格。经过测算，纳入试点的 5 家县级公立医院，药品加成取消后减少的合理收入约为 7770 万元，这部分减少的收入 20%由广州市和从化、增城两级财政负担，其余 80%则通过医疗服务价格调整来消化。这项改革于 9 月 1 日正式开始实施。医药价格政策调整将与财政、医保、卫生等改革协调实施，《方案》明确，调整后的医疗技术服务项目将按规定纳入医保支付范围，确保改革后群众医疗费用负担有所减轻，而医务人员合理收入水平不降低。

去年 6 月，国务院办公厅印发《关于县级公立医院综合改革试点意见的通知》，明确以破除“以药补医”机制为关键环节，力争使县域内就诊率提高到 90%左右，基本实现大病不出县。目前，全国约有 300 个县级公立医院综合改革试点。

### **Guangzhou City Initiates Pilot Reform of County-Level Public Hospitals**

Guangzhou City Council Executive Committee reviewed and approved “The Plan for City of Guangzhou County-Level Public Hospital Medical Care Reform Pilot” (referred to as “The Plan” from this point on), formally initiating reform in two counties (County Conghua and County Zengcheng).

The Plan aims to abolish the past policy of selling drugs at high prices to compensate for medical services through reforming the medical care payment system. Pilot hospitals will sell drugs to all patients at cost (except traditional Chinese medicine products), reduce costs of procedures such as MRI and CT scan, and increase costs of provided medical services by reasonable amounts. For the five county-level hospitals in the pilot program, it is estimated that their revenue will decrease by ¥7700 due to lowered drug prices. These hospitals will recoup their losses through local government coffers (20%) and adjusted prices for medical care services (80%). The adjusted costs for medical care services will be covered under the current medical insurance plans.

China’s State Council stated in last June that one of the reform aims is to allow most patients to receive adequate medical care within their counties. Currently, there are 300 county-level public hospitals piloting the reform.

#### **《社会保障体制改革的方案设计》报告发布**

《第一财经日报》2013-06-18

<http://news.sina.com.cn/c/2013-06-18/033127425305.shtml>

近日，中国金融四十人论坛发布内部重大课题《深化经济体制改革重点领域一揽子方案》子课题《社会保障体制改革的方案设计》报告。报告以养老保障体制和医疗保障体制为主要讨论对象，对下一步改革思路提出了若干建议和方案。

报告还创新性地提出评价社会保障体制好坏的五个标准：一是能否维持财务的可持续性；二是能否保持对居民的正向激励；三是能否促进社会公平；四是能否促进人口自由流动和就业增长；五是能否通过建立社会安全网扩大消费。根据这“五个标准”，报告对不同方案作出了评估。此外，在医疗保障体制改革方面，报告根据现存问题，提出了要在医疗卫生体制改革三大互相冲突的目标：可及性、费用控制与医疗服务质量之间寻找综合平衡的原则。

在具体方案上，课题组成员出现了“一个主张，两种思路”的分歧。相同主张是逐步做实个人账户，真正发挥其对人们的激励作用。同时，在对历史债务以及未来资金缺口详细测算的基础上制定长远规划，以国有股份和收益、财政补助等充实和增强养老保障储备基金，确保当期养老金发放并为未来出现支付缺口做好准备。

报告提出：建立财务可持续的基本医疗保障制度，大力发展商业性医疗保险，形成布局科学的公共卫生服务体系 and 医疗服务体系，放开医疗市场准入，实现多元办医格局，以完善激励为导向加快公立医疗机构改革，推动医疗科技进步，使医疗卫生服务可及性、服务质量、服务效率和群众满意度显著提高，实现“2020 年人人享有基本医疗卫生服务”的总目标。

### **Release of the Report on “Design of Social Security System”**

Recently, China Finance Forty People Forum released a report on the important topic of “Designing a Reformed Social Security System”, a subtopic for the ongoing debate to produce a “Package Plan for Deepening Economic Reform in Focus Areas”. This report focused on security for the elderly

and medical insurance for patients, proposed several plans and provided suggestions for the next round of reforms.

The report also introduced five areas for evaluating an existing social security system: whether it is sustainably funded; whether it continuously provide positive incentives to citizens; whether it increases equality; whether it encourages free movement of labor force and increase job growth; and whether it stimulates domestic spending by establishing a social safety net. Based on these 5 standards, the report assessed various reform plans.

The reported pointed to the importance of liberating personal accounts and through them provide positive incentives to citizens. Long term plans need to be drawn for the elderly security based on detailed estimation of past debts and possible future funding shortfalls. Various funding streams need to be considered to strengthen the slush fund for the elderly security to ensure timely distribution of funds and shore up possible budget gaps.

The report points out several areas that are needed to achieve the overarching goal of “Everyone Enjoys Basic Medical Care Service by 2020”: a sustainably funded basic medical care insurance system, well-established commercial medical insurances, an efficient network of public health centers and medical care service centers, a more open medical care market, and diversified hospital funding mechanisms.

#### **人社部:提高居民医保待遇 推进大病保险试点**

《中国经济网》 2013-08-02

[http://big5.ce.cn/gate/big5/finance1.ce.cn/rolling/201308/02/t20130802\\_1077817.shtml](http://big5.ce.cn/gate/big5/finance1.ce.cn/rolling/201308/02/t20130802_1077817.shtml)

人力资源和社会保障部召开新闻发布会，人力资源社会保障部政策研究司司长、新闻发言人尹成基表示，下一步社会保障工作将落实居民医疗保险提高待遇政策，全面推进城乡居民大病保险试点。

社会保障工作下一步安排如下：

一是进一步完善各项社会保险制度。修订失业保险条例，推进失业动态监测；制定实施劳动能力鉴定管理办法；完善新农保和城居保政策，推进合并实施和强化激励；制订生育保险办法；深化医疗保险付费方式改革，全面实行总额控制，加强医疗服务监管，完善异地就医医疗保险管理服务办法。

二是进一步扩大社会保障覆盖面。开展全民登记参保试点，积极引导城乡居民长期参保续保；重点做好农民工、非公经济组织从业人员及私营企业职工等群体参加职工社会保险的工作；结合安全生产大检查，大力推进工伤保险参保全覆盖。

三是统筹研究制定兼顾各类群体的社会保险正常调整机制；落实居民医疗保险提高待遇政策，全面推进城乡居民大病保险试点。

四是加强基金监管。大力推进非现场监督体系建设，研究建立社保基金安全评估指标体系；深入研究养老保险基金保值增值问题；做好企业年金推进和监管工作。

五是强化社会保障管理服务。进一步整合经办管理资源，推进经办管理标准化建设，提高运行效率。打造“网上社保”服务平台；社会保障卡争取发放到5亿张。

#### **Improve Medical Insurance for Residents: Advance Piloting Insurance for Serious Illnesses**

At a recent news conference, the Ministry of Human Resources and Social Security announced their plan to advance the piloting of insurance for serious illnesses.

There are several main components of the plan.

1. Improve the social security system: revise unemployment insurance plan and advance unemployment monitoring; formulate plan to appraise labor forces; improve medical insurance plans for rural and urban residents; formulate maternal and child medical insurance; deepen medical care reimbursement reform; improve medical care and reimbursement for residents who seek medical care outside their jurisdiction.
2. Broaden the coverage of social security: pilot enrolling all residents for insurance plans; ensure participation by urban labor force of rural origins, labor force of informal economic enterprises, employees of private businesses; increase coverage of occupation safety insurance.
3. Coordinate an adjustment mechanism to cover all population groups and extend the coverage of serious illness insurance to all rural and urban residents.
4. Strengthen the supervision of funds: establish an off-site monitoring system to evaluate the safety of the funds; in-depth study of sustainably fund security for the elderly; promote businesses to establish annuity programs.
5. Strengthen management of social security services: consolidate human and material resources for managing social security system; increase operation efficiency; establish an online service platform for social security services; aim to distribute 500,000,000 social security cards.

#### **武汉：未就业应届毕业生 也可参加职工医保**

《长江晚报》2013-08-06

<http://www.changjiangtimes.com/2013/08/451968.html>

武汉市人社局近日发文，为鼓励高校毕业生在武汉创新创业，在武汉毕业的应届大学生，毕业后可直接在汉参加城镇职工医保，并不设6个月医保待遇等待期。以往大学毕业生毕业后如未找到工作，就不能参加职工医保。而居民医保的报销比例低于职工医保，如在“空窗期”生病，将缺乏有效的保障。

有关通知规定，武汉市行政区域内，各类全日制普通高等学校（含民办高校、独立学院、分校、高等职业技术学院）及高校科研院所中，接受普通高等学历教育的全日制本专科学生、全日制研究生（以下统称大学生），都可按规定参加本市城镇居民基本医疗保险，其毕业后医保待遇资格截止期为毕业当年的8月31日。

应届大学毕业生如找到工作，可随用人单位参加城镇职工基本医疗保险；应届大学毕业生灵活就业或暂未就业的，也可自愿在个人窗口参加职工医保，或在规定时间内办理次年的居民医保参保手续。

应届大学毕业生在个人窗口参加职工医保，须提供本人身份证和毕业证原件。对于在毕业当年的12月31日前参保的应届大学毕业生，不设6个月的医保待遇享受等待期，即从其参保缴费的次月开始享受职工医保待遇。

#### **In the City of Wuhan, Newly Graduated College Students Participates in Workers' Medical Insurance Even Before Landing a Job**

In order to encourage college graduates to stay in the city and put their entrepreneurship to work, Wuhan City Human Resources and Social Security Bureau announced that students newly graduated from post-secondary schools can immediately join the Urban Workers' Insurance Plan without a six-month probation period. In the past, new graduates without a job can't join the insurance plan, and could lack adequate protection if they succumb to illnesses.

Under the new plan, students attending any Wuhan area full-time post-secondary education institutions can participate in the Urban Residents Insurance Plan; this plan ends on August 31 the

year when the student graduates. If a new graduate finds a job, he or she can join the Urban Workers' Insurance Plan through his or her employer. If a new graduate doesn't have an employer, he or she can either join the Urban Workers' Insurance Plan or renew their Urban Residents Insurance Plan before the deadline.



## ABOUT CHPAMS: FEATURE MEMBER

Qi (Harry) Zhang, BA, PhD

Qi (Harry) Zhang (张琪) is a tenured Associate Professor in the College of Health Sciences at Old Dominion University (ODU). He graduated from Fudan University with a BA in Economics in 1998, University of Alabama with a PhD in Economics in 2001. Dr. Zhang worked as a Senior Health Outcomes Researcher at Section of General Internal Medicine at University of Chicago for four years prior to joining ODU in 2005. His research interest focuses on the socioeconomic disparity in health outcomes, including obesity and food insecurity among low-income population. Dr. Zhang has published 21 peer-reviewed papers on journals such as *Social Science & Medicine*, *Annals of Internal Medicine*, and *American Journal of Clinical Nutrition*. He has been the Principal Investigator of numerous research grants funded by the National Institutes of Health, Centers for Diseases Control and Prevention, and U.S. Department of Agriculture. Dr. Zhang serves on the editorial board of three international journals and periodically reviews manuscripts for about thirty academic journals. He also serves as a proposal reviewer for the U.S. Agency for Healthcare Research and Quality, U.S. Department of Agriculture, and the China Medical Board.



Qi (Harry) Zhang, BA, PhD

### 1. What inspired you?

Almost 15 years ago when I first arrived in the United States, a Chinese professor from Emory University encouraged us: "From now on, you should live with passion, imagination, and ambition." After striving in the United States for 15 years, the quote still is a source of inspiration for me. Life is not an easy journey for most people and how to maximize the meaning of our lives is a challenging question, even to the best economists in the world.

### 2. If you had not entered your current profession, what would you have liked to do?

Perhaps I would be a historian. It might sound boring to a lot of people, but history is always a fascinating topic for me throughout my life. History major was in my deep heart when I was applying for college. Unfortunately due to the fad at that time, I ended up majoring in international finance, which was the most popular major with decent salary expectation. Ironically, I settled my job neither in Investment Banking nor Museum. Retrospectively I learned two lessons: "Follow your heart" and "Do not chase fashion trends."

### 3. What is your worst working habit?

Although specialization and becoming a guru in one narrow area is desirable for most people, I just cannot focus my interests either in work or in my life. I have so many uncontrollable curiosities in a variety of fields, such as history, politics, laws, religion, etc. Perhaps I could have achieved more in my own profession if I limit the efforts only to the job-related fields. I think the world and life as a complex system and every part could be related. Thinking like a baby and exploring the unknown fields sound exciting and refreshing to me.

## ABOUT CHPAMS: MEMBERS' UPDATES

### AWARDS

Dr. Zhuo (Adam) Chen's paper titled "The Role of Geographic Scale in Testing the Income Inequality Hypothesis as An Explanation of Health Disparities" (coauthored with Dr. Carol A. Gotway Crawford) received the U.S. CDC Excellence in Behavioral and Social Sciences Research Award. The [paper](#) was published in *Social Science & Medicine* in September 2012.

### CAREER AND PROFESSIONAL APPOINTMENT

Dr. Zhuo (Adam) Chen was invited to be an associate of the China Research Center (<http://www.chinacenter.net/>), Atlanta. The Center is led by Professor Penny Prime, Georgia State University. The Center draws expertise from the universities and institutions around the City of Atlanta and neighboring regions to promote understanding of greater China based on in-depth research and experience.

Kun Zhang, Ph.D., joined the Centers for Disease Control and Prevention in September 2013 as a Prevention Effectiveness Fellow.

### NEW PUBLICATIONS

Jay Pan, Peng Wang, Xuezheng Qin, Shufang Zhang. Disparity and convergence: the Chinese government health expenditures 1997-2009. *PLOS ONE*, 2013(8): e71474.

Xinglin Feng, Mingfan Pang, John Beard. Health system strengthening and hypertension awareness, treatment and control: data from the China Health and Retirement Longitudinal Study. *Bulletin of the World Health Organization*, published online: 10 September 2013.

Longjian Liu, Nunez AE, Yu XP, et al. Multilevel and Spatial-Time Trend Analyses of the Prevalence of Hypertension in a Large Urban City in the USA. *Journal of Urban Health*, 2013, Jul 30. Epub ahead of print.

Longjian Liu, Yuan An, Ming Chen, et al. Trends in the Prevalence of Hospitalization Attributable to Hypertensive Diseases among United States Adults Aged 35 and Older from 1980 to 2007. *American Journal of Cardiology*, 2013(112): 694-699.