

**2015 年PSBH<sup>®</sup>中国区卓越项目奖申请书**  
**Award for Outstanding PSBH<sup>®</sup> Project 2015 Application Form**

**项目详细内容 Project Details:**

项目名称	肿瘤患者在社区开展PICC管维护的需求干预		主题	
Project Title	Intervention on PICC line maintenance for brain cancer patients in the community		Theme	
项目负责人	陈丽红	项目成员 Project Team	谢丽英、潘建英、姚芳等	
Project Lead				
经费 Funding	RMB 2万			
项目起止日期 Project Period	起始: 2013 年 1 月 1 日 Start Year Month Day	完成: 2013 年 12 月 31 日 End Year Month Day		
问题描述 Problem Description 请描述问题起因及存在多久、问题形塑过程中的关键人员及人数。 请以中英文填写。	<p>从 20 世纪 90 年代后期开始, 国内肿瘤患者化疗时采用经外周置入中心静脉导管 (PICC) 日渐增多。采用 PICC 有利于减少患者因反复外周静脉穿刺带来的痛苦, 避免化疗药物对外周血管的刺激, 保护血管, 减少局部组织坏死等不良反应, 从而保证肿瘤患者化疗方案安全、按时、准确无误地执行。</p> <p>肿瘤患者正规化疗一般需要3-6个疗程, 22-28d为1周期, 持续半年时间。化疗间歇一般为2-3周, 在此期间患者需要出院回家修养。PICC管置管后至少每7d需要维护1次。而目前开设PICC护理门诊主要集中在大型医院。</p> <p>在练塘社区, 由于恶性肿瘤患者日益增多, 化疗期间携带有PICC管回归社区的患者增加, 他们带管时间长, 治疗间歇期的导管维护和指导的需求量大。因此出院后的治疗间歇期导管维护成了较为突出的问题。</p> <p>Since late 1990s, there has been an increased in the use of PICC line chemotherapy for brain cancer patients. PICC placement reduces the pain caused by venipuncture, avoids chemotherapy peripheral vascular stimulation, protect blood vessels, thus reducing local tissue necrosis and other adverse reactions. Thus</p>			

	<p>this ensures chemotherapy is safe, timely and accurate for the patients.</p> <p>Regular chemotherapy in cancer patients generally requires 3–6 months of treatment, an intermittent cycle of 22–28 days in the six months duration. During the rest period of 2–3 weeks, the patient is discharged. PICC lines need to be maintained at least once every week. The PICC outpatient care is offered mainly in large hospitals only.</p> <p>In Liantang community, due to the growing number of cancer patients, PICC lines maintenance demands have been increasing. Therefore, issues involving PICC line maintenance during intermittent become more prominent.</p>
<p><b>解决方法</b> Solution 请描述可行的解决方法和形塑过程。 <i>请以中英文填写。</i></p>	<ol style="list-style-type: none"> <li>1. 取得相关人员的支持：卫生局和中心领导的大力支持，课题资金的配套等；社区内乡村医生、预防科癌防人员的配合，寻访服务对象等；全体社区护士的共同努力，积极学习 PICC 相关技术；取得携带 PICC 管回归社区的患者及家属配合等</li> <li>2. 查阅资料，设计癌症患者对 PICC 管维护需求的调查表，包括基本情况、目前维护相关信息、经济负担等。确定评估工具。</li> <li>3. 患者对 PICC 管社区维护需求的现况调查：通过团队下乡、慈爱俱乐部、癌友访视、电话采访等方式进行。</li> <li>4. 制作宣传手册，如携带 PICC 的日常维护小贴士，PICC 管宣教单等。</li> <li>5. 社区护士培训：利用与上海第一人民医院医联体的有效资源，选派护士轮流到三级医院 PICC 管维护中心进修，内容为 PICC 管维护操作流程、注意事项、健康宣教内容等。</li> <li>6. 配备专门 PICC 管维护治疗室，硬件设施完善，备齐肝素帽、贴膜、无菌生理盐水等所需用物。</li> <li>7. 与社区团队，预防科癌防人员、乡村医生协作，不断收集携带 PICC 管回</li> </ol>

归家庭的患者。对需要在本中心做 PICC 维护的化疗间歇期患者给予护理，首次来我中心做 PICC 管维护护理时发放维护记录单及问卷调查表，每周 1 次冲管维护及日常居家维护知识宣教。6 个月后，通过对维护费用，交通费，花费时间，患者及家属对相关知识知晓率、并发症等进行比较。

通过医联体的有效资源，培养了 8 名护士规范化的 PICC 维护技术。使本中心 32% 的社区护士掌握 PICC 维护技术。提高社区护士的护理新适宜技术水平，拓展了社区护理服务内涵，真正体现了优质护理服务。

选取了 36 名携带有 PICC 管的肿瘤患者为他们进行 PICC 管维护。维护次数为 320 人次。通过对 36 名携带 PICC 管回归社区的患者进行正确的 PICC 管维护及健康教育指导，使患者及家属 PICC 管认知状况干预前后对比明显提升。

使肿瘤患者的 PICC 维护费用及往返交通费在上级医院及社区的对比中费用降低明显。

1. Obtain political and financial support from relevant organizations including the Health Bureau, and leaders of the community health center, professional support from rural doctors and cancer prevention personnel, technical support from community nurses to equip themselves with PICC related skills, and also seek alignment with PICC line patients and their families.
2. Research and design questionnaire to understand PICC line maintenance needs, including basic information, current maintenance conditions, economic status. Determine assessment tools.
3. Status of patients with PICC line maintenance needs: visit rural areas, initiate support group, visit patients personally or through phone calls.
4. Prepare educational brochures to include PICC line maintenance tips and basic information.
5. Community nurse training: use available human resources from

	<p>Shanghai First People's Hospital to train nurses in other third-class hospitals on PICC line maintenance processes, precautions needed, and health education sharing.</p> <p>6. Equip community health centers with PICC line maintenance treatment room. Ensure the facility is well equipped with heparin caps, foil, and sterile saline etc.</p> <p>7. Collaborate with the community, cancer prevention personnel and rural doctors to enroll discharged patients with PICC lines. Obtain maintenance records and other information from the patients. Conduct weekly training for PICC line maintenance. After 6 months, compare PICC line maintenance costs with the costs before intervention, particularly on travel costs, time, knowledge level among patients and their families and rate of medical complications.</p> <p>Through effective use of resources from the healthcare system, 8 community nurses were trained with PICC line maintenance skills, which represent 32% of the nurses in our community health center. Technical skills and knowledge of the community nurses are thus raised, and it is a step towards excellence in nursing services.</p>
<p>成效 / 影响力 Outcome / Impact 请提供方案实施前的 基线数据和实施后的 成果指标。 <b>请以中英文填写。</b></p>	<p>1. 提高社区护士的护理新适宜技术水平，拓展了社区护理服务，提升社区护士的护理科研水平。</p> <p>2. 已有 36 例 PICC 置管的肿瘤患者在本社区接受 PICC 维护。维护次数为 320 人次，未发生任何并发症。</p> <p>3. 本中心 32% 的社区护士掌握 PICC 管维护技术。</p> <p>4. 患者满意度 100%。</p> <p>5. 患者及家属 PICC 管认知状况干预前后对比明显提升（见表 1）。</p> <p>6. 肿瘤患者的 PICC 维护费用及往返交通费在上级医院及社区的对比中费用降低明显（见表 2）。</p> <p>7. 论文“居家患者 PICC 管路维护的研究进展”，已在《上海医药》下半月刊 2013 年第 11 期发表。</p>

1. Improved the skills and level of services of community nurses, expanded community health services, and enhanced research skills among nurses.
2. There have been 36 patients using PICC line maintenance services in the community center, and there have not been any medical complications in during 320 maintenance sessions.
3. 32% of the community nurses are equipped with PICC line maintenance skills.
4. Patient satisfaction level was at 100%.
5. Knowledge of the patients and their families increased significantly after the intervention. Refer to Table 1.
6. Maintenance costs and travel costs decreased significantly after patients stopped needing to travel to bigger hospital after the intervention
7. The article “Research on PICC Line Maintenance Home Care Patients” was published in Shanghai Medical on issue 11B in 2013.

表 1、PICCC 管路患者认知状况调查 (n=36 例)  
Table 1. PICC Line Patient Knowledge Levels

项目 Item	干预前 (平均分) Before Intervention (Average)	干预后 (平均分) After Intervention (Average)	t 值 t-value	P 值 p-value
并发症 Complications	3.8± 1.2	14.1± 1.1	37.9634	0.0000 <0.01
优点 Advantages	4.8± 1.4	15.7± 1.4	33.032	0.0000 <0.01
影响 Impacts	4.6± 1.4	10.3± 1.1	19.2086	0.0000 <0.01
维护时机和要求 Maintenance timing & needs	4.0± 1.5	20.6± 1.7	43.9317	0.0000 <0.01
注意事项 Things to note	6.1± 1.7	19.3± 1.1	39.1141	0.0000 <0.01

表 2、PICC 管路患者路途时间与费用情况  
Table 2. PICC Line Patients Travel Time and Costs

项目 Item	往返交通时间(分钟) Return trip duration (mins)			每次维护费用(元) Maintenance cost (¥)		交通费(元) Travel cost (¥)		
	< 30	30-60	> 60	< 40	> 40	< 20	20-40	> 40
医院组 Hospital group	0	4	32	11	25	4	13	19
社区组 Community group	32	4	0	36	0	34	2	0
x <sup>2</sup>		64			38.3		50.8	
P		<0.05			<0.05		<0.05	

  

<p style="text-align: center;"><b>执行力</b> Excellence in Execution</p> <p>请提供评价标准(如时间、预算、人力、干预族群的满意度), 及计划初始估计与成果的比较。例: 规划运行4个月, 800人民币。实际为4个月, 花费680人民币。 <b>请以中英文填写。</b></p>	<ol style="list-style-type: none"> <li>1. 通过对 30 名携带 PICC 管回归社区的患者进行正确的 PICC 管维护及健康教育指导, 使患者及家属 PICC 管日常维护相关知识知晓率达到 80%及以上。</li> <li>2. 30 名 PICC 管患者在本社区维护常见并发症发生率控制在 10%以内。</li> <li>3. 提高社区护士的护理专业水平, 通过进修培训, 30%练塘社区护士掌握 PICC 管维护技术。</li> <li>4. 使肿瘤患者的 PICC 维护费用及往返交通费降低 50%。</li> </ol> <ol style="list-style-type: none"> <li>1. Trained 30 PICC line patients on daily maintenance and health tips, the knowledge and awareness level on PICC care among patients and their families reached 80%.</li> <li>2. Complication occurrence rate is controlled at less than 10% among 30 PICC line patients.</li> <li>3. 30% of the nurses in Liantang community now have the skills of PICC line maintenance through training. This increased nurses' professionalism.</li> <li>4. PICC line maintenance costs and round-trip travel costs reduced by 50%.</li> </ol>
<p style="text-align: center;"><b>发展性</b> Sustainability</p> <p>请描述如何持续项目成果, 及在其他区域的可复制性。例: 若需在五个社区复制此方案, 需要的策略合作伙伴为乙方及丙方, 估计需要五千人民币, 可能从以下三</p>	<p style="text-align: center;">为了贯彻落实世界卫生组织医疗卫生服务“社区化”原则, 在练塘社区对肿瘤患者开展 PICC 管维护技术, 以达到为患者节约大量人力、物力、财力, 满足患者的需求, 提高患者生命质量的目的, 从而为在青浦地区全社区推广 PICC 管维护技术奠定基础。</p> <p>In order to implement the World Health Organization vision of</p>

<p>个单位获取, 及资金取得的时间表。  <b>请以中英文填写。</b></p>	<p>"communitinize" healthcare, brain cancer patients could now enjoy PICC line maintenance services in the Liantang community. This saves a lot of manpower, material and financial resources while meeting the needs of the patients, and improves the quality of life of patients, providing a foundation for PICC line maintenance promotion in the communities in Qingpu district.</p>
<p><b>创新力</b>  Innovation  请描述方案执行中遇到的挑战、应对过程及方式。  请提供任何项目执行的相关照片、影片。如前后的比较、干预对象、宣教范本等。  <b>请以中英文填写。</b></p>	<p>(一) 遇到的挑战和汲取的经验 (Challenges and Lessons Learned )</p> <ol style="list-style-type: none"> <li>1. 缺乏 PICC 管路相关并发症(如机械性静脉炎) 的早期症状及正确处置方法。与第一人民医院 PICC 护理专家联系, 向患者健康宣教解决方法。</li> <li>2. 评估患者出现并发症, 但由于社区中心无此药物, 与上级医院联系转院维护。</li> <li>3. 样本量少, 知识水平较低。</li> </ol> <ol style="list-style-type: none"> <li>1. Lack of early diagnosis and treatment methods for early PICC line related complications (such as mechanical phlebitis). Connected with PICC care specialists in First People's Hospital and sought support for ways to educate the patients.</li> <li>2. When patients were diagnosed with complications, there was a lack of treatment. We referred patients to go to higher hospitals.</li> <li>3. Sample size was small, the average level of knowledge was low.</li> </ol> <p>(二) 创新点 (Innovation)</p> <ol style="list-style-type: none"> <li>1. 利用医联体的有效载体, 把三级医院规范化的 PICC 维护操作引入到社区。</li> <li>2. 在社区成立 PICC 维护室, 并开展 PICC 维护是首家。</li> <li>3. 采取电话预约的形式, 更人性化。</li> </ol> <ol style="list-style-type: none"> <li>1. Effectively utilize the healthcare system, introduced standardized PICC maintenance processes in third class hospitals to the community.</li> </ol>

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|  | <ol style="list-style-type: none"><li>2. Being the first community health care center to set up a PICC line maintenance room.</li><li>3. Offer a more personalized service in terms of telephone booking.</li></ol> |
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