

出國報告（出國類別：進修）

美國駐院醫學及駐院科醫師制度觀摩

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摘要

駐院專科醫師 (hospitalist) 的概念發表於 1996 年，隨後在美國落地生根，美國芝加哥大學醫學中心是於 1997 年開辦，其領導者 David Meltzer 教授是此制度的開創者之一，目前是芝加哥第二大的 hospitalist program，其特色為學術研究氣息濃厚，且充滿人性化的制度。Hospitalist 除了與內科共同負責一般內科病人之外，也負責一般內科會診，並與外科系協同照顧 (co-management)，在協助院方醫療品質上多所貢獻，相關研究亦發表在高排名的期刊。此次赴美進修，收穫良多，體會到一個新制度從草創到成熟，需要面臨的各種內部和外部挑戰，唯有不斷檢討改進的團隊才能成功。Hospitalist 的精神值得台灣學習，此制度也有潛力解決未來台灣可能遭遇的問題。

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目的

駐院專科醫師 (hospitalist) 的概念發表於 1996 年美國新格蘭雜誌(New England Journal of Medicine)，主要由內科和家醫科醫師組成，是專職照顧住院病人的專科醫師，目前有許多的證據支持這個制度，能進一步減少住院天數，兼顧照護品質並節省醫療費用，目前在美國有越來越多的醫院聘用駐院專科醫師，不少教學醫院也有駐院專科研究員訓練(hospitalist fellowship)。美國在面臨住院醫師(resident)人數萎縮的現況中，更加速住院專科醫師的成長，雖然不乏一些批評的聲音，駐院專科醫師的功能與存在價值是普遍被接受的。

國衛院的研究顯示現今的台灣健保制度，使得現在醫學生不願奉獻於高風險及高付出但卻相對低報酬的內外科。台灣未來勢必將面臨與美國相同的問題。此外，次專科醫師的飽和，也迫使更多次專科醫師未來必須從事一般科的工作。由此可知，駐院專科醫師制度在台灣也是勢在必行。

此行至美國芝加哥大學短期進修，希望能實際了解美國駐院醫學十年來的演進及遭遇的問題，以及目前在美國醫學中心實際實行之情況，作為本院未來實施此一制度之參考。

過程

感謝芝加哥大學醫學中心駐院科主任 David Meltzer 教授應允，讓我有機會參與他所帶領的駐院科團隊。抵達美國之後，他的秘書隨即安排我從旅館搬至校區內的 International House，這是一個國際學生及外國來訪學者居住的宿舍，除了治安較讓人放心，也讓我更近距離觀察芝加哥大學。

芝加哥大學醫學中心算是實施駐院專科醫師制度的鼻祖之一，1997 年由 David Meltzer 教授開始，帶領兩位內科背景的主治醫師，以臨床研究的方式開始該院駐院醫學制度，研究發現，在降低住院天數與控制醫療支出方面，第一年 hospitalist 與傳統內科主治醫師差別不大，但第二年開始，即有統計上顯著的差別，除了平均住院天數減少，醫療支出下降，也顯著降低 30 日死亡率。換言之，hospitalist 在臨床效率與醫療資源分配上，也需要經歷一段學習曲線。這個研究隨後也刊登在 2002 的 Annals of Internal Medicine。

因為優秀的成績，芝加哥大學醫學中心隨即在一般內科部 (Department of General Internal Medicine) 中成立了一個 Section of Hospital Medicine，由 David Meltzer 擔任主管，開始招募主治醫師，凡是內科住院醫師訓練三年，獲得內科專科執照的醫師，都可以來應徵 hospitalist，迄今已有 17 名主治醫師。

Hospitalist 在醫院中所扮演的角色，主要是提供一個「每天 24 小時，每週 7

天」不間斷的醫療照顧，使得醫院在沒有足夠住院醫師輪班的狀況下，依然可以維持照顧品質，甚至品質更好。美國在 2003 年開始立法限制住院醫師的工作時數（每週不得超過 80 小時，連續值班不得超過 30 小時），使得各醫院陷入沒有住院醫師可以值班的窘境，此時 hospitalist 適時地解決了這個問題。

芝加哥大學醫學中心採用的模式是，將所有一般內科病人打散，一部份由傳統內科主治醫師帶領住院醫師、實習醫師、醫學生照顧，一部份由 hospitalist 照顧，當住院醫師手上的病人滿額了，即不再接新病人，改由 hospitalist 來接新入院病人，並由 hospitalist 來照顧，這是 hospitalist 在內科中的主要任務。Hospitalist 和內科是合作關係，也會輪流參與內科的教學工作，指導學生及實習醫師。

Hospitalist 也負責所有一般內科的會診工作，由於許多外科系病人有內科疾病，需要會診內科系，此時 hospitalist 提供了最有效率的照會協助，使得術前術後的照護品質大為提昇，以外科 DRG 的角度，hospitalist 有效率的會診協助，大大降低了病人超長住院的風險。

Hospitalist 的另一個角色是 co-management，類似整合醫療的概念。在芝加哥大學醫學中心，肝臟移植外科團隊與 hospitalist 合作，每天中午開會討論病情及是否能出院，當肝膽外科醫師認為他的病人需要住院時，不必擔心無人照料，因為有 hospitalist，由於這樣的 model 非常成功，目前肺臟移植小組也積極希望能與 hospitalist 合作。

談到創立 section of hospital medicine 過程中所遭遇的困難，Meltzer 教授語重心長的表示：要先讓 hospitalist 有一個好的工作環境和合理的工作量，才會有資深的主治醫師留下，才能提高照顧品質（Experience matters！在他所發表的研究中也證實了這一點）。科內負責安排臨床事務的主治醫師 Elmer Abbo 告訴我，實施這個制度需要主治醫師站在第一線 primary care，因此最初會遭遇的問題就是人員的疲勞（burn-out），當 hospitalist 感覺這份工作讓他 burn-out，最終會選擇離去，因此整個排班制度的設計非常重要，要兼顧工作量和作品質，另外，要解決一些人事問題。

Dr. Abbo 說：“Burn-out”不是只有工作量的因素，他歸納了六個因素決定一個醫師是否會 burn-out，這六個因素分別是：Volume、Complexity、Autonomy、Respect、Hour of Work、Salary。因此，領導者務必設計出一個讓這六個因素平衡且不失控的好制度，才能留得住人才。舉例而言，hospitalist 如果被醫院的其他人員視為「取代 resident 的勞力」，或是「被壓榨的資淺主治醫師」，則很少人會願意做下去，工作快樂且獲得尊敬是很重要的，並不是只看工作量（volume）。

以工作時間來說，各家醫院的 hospitalist 都不同，平均一個月要上 15 個班，一年要上 26 週，但是，如何排班是一門大學問，一旦排班有失公平或者太勞累，整個系統就瓦解了。就好的方面來看，如果排班設計得好，優點就是「彈性」，在沒有上班的期間，hospitalist 可以攻讀 master degree，或安排個人活動。芝加哥醫學中心的 hospitalist 排班方式是用「點數法」(point-weighted schedule)，乍聽之下，就和我們當年實習醫師排班很像，但 Dr. Elmer 教我 point-weighted schedule，卻用了 4 次面授，每次約 1 到 2 小時的時間才完成，這是一個非常深入「人性」的排班系統，換句話說，我們都把排班當作 work sharing，而 Dr. Elmer 把排班當成是組織管理和招募人才的工具，只是一個概念的扭轉，他排出的班讓所有人都上得很高興。

薪資也是很重要的一點，在美國的保險制度中，醫院給 hospitalist 的薪資接近是一種固定薪的型態，服務量和薪水的關係不大，沒有衝績效的必要，這一點和其他次專科醫師不同，因此，hospitalist 不會多做無謂的檢驗檢查，對於醫療支出的控制有很大幫助。在薪資行情方面，hospitalist 的年薪居中，雖然比不上某些次專科醫師，但比一般開業的家庭醫師高，這樣的訂價，不會使醫師畢業都跑去開業，會有一批人選擇被醫院僱用，當 hospitalist，但還是有醫師一邊當 hospitalist，一邊想擠進次專科的窄門，畢竟高薪是很大的驅動力。

美國的私人醫療保險知道 hospitalist 可以控制醫療費用的支出，因此對於各醫院實施 hospitalist 樂見其成，也願意給付。

值得一提的是，hospitalist 制度，絕對不等同於 VS 帶 NP 照顧病人的模式(這是很多區域醫院行之多年的模式，其品質自不待言)，Hospitalist 是一個以主治醫師專責照顧病人為核心價值下，衍生出的模式，換言之，住院病人不會因為主治醫師在看門診或開刀，而使一個臨床決定或處置 delay。在美國，hospitalist 主治醫師是不看門診、不作 procedure、不開刀的，專職照顧病人是 hospitalist 的精神。在芝加哥醫學中心，VS 有 17 位但 NP 只有 7 位，NP 的角色是輔助流程，而不是去填補住院醫師的缺額。

心得

美國經驗可以提供借鏡的是：在美國，不同醫院各自發展其獨特的駐院科制度，不同的合作模式，不同的輪班制度，充滿彈性，而且更重要的是，它一直不斷檢討改善，一直朝向更好的制度演化。在芝加哥大學醫學中心光輝的成績背後，他們也曾跌一跤，為了品質和成績讓團隊中的醫師面臨 burn-out，直到領導者發現要創造一個可以永續 (sustainable) 的制度和 work environment，才是最重要的。這是一個重視「制度」，也重視「人」的體系。

加入急診後送病房邁入第三年，也甫從美國進修回來，我期許自己成為制度的創造者，這個世界需要的不只是「人才」，更需要「創才」。在 2012 年，有更多新的制度要在病房測試，有更多的新血加入，期待我們能發展出一套價值創新的照顧模式，所謂的「整合醫療」，在台灣只停留在口號，但在美國早已由 hospitalist 揭竿起義，作得大聲有色，這是我們可以學習的地方。

建議事項

1. 台大醫院作為醫界的龍頭，應該更早洞燭先機，四大科住院醫師不足，住院醫師工時限制等等，這些挑戰一定會在未來幾年遇到，因此像美國這樣以 hospitalist 來解決人力問題，以確保醫療品質，是台灣未來必須走的路，台大醫院先邁出一步，就取得了先機。目前的 hospitalist 病房開辦兩年多來，成績出色，但還要更好，一個會自動檢討改進的制度才會一直領先，希望院方能支持在 hospitalist 病房的推行的新制度及試驗。
2. 台大醫院，應該以提升醫療品質為期許，應該從過去那一套 PPF 制度中走出來。目前的績效制度，是重「量」不重「質」(fee for service)，以固定的績效對應優劣不一的品質，會傷透了努力上進者的心，也間接使得高危險、複雜的病患，成為各科躲避的燙手山芋。對一個頂尖的醫學中心來說，我們還要提高「品質績效」(pay for performance) 的比重，才能激勵團隊士氣，才能讓願意照顧高難度病患的團隊得到 credit，績效制度應該有更多面向與品質指標掛勾。Equity、Effectiveness、Efficiency 是品質的三大指標，Hospitalist 病房不主動挑病人，是做到 equity，得到了很多掌聲。在 Efficiency 層面，經過我們不斷向績效小組爭取，從 2012 年 1 月起，hospitalist 病房的績效已經與一般病房不同，與「病床周轉率」連動，這是 Pay for Efficiency 的開始，是一大進步，當然 Efficiency 更深的含意是醫療資源的使用要 cost-effective，這是遠大的目標。未來我們還可以朝向 Pay for Effectiveness，譬如績效和 CMI 連動、和再住院率、再急診率等指標連動等等，都是可以嘗試的。我們用院內制度，可以把健保局單一給付（不管簡單複雜，住院診察費都是 310 點）的荒謬制度給扭轉，我想這就是台大的進步！
3. 醫院傳統的上班模式，使得醫院在週一到週五是醫學中心等級，什麼都能做，到了週末假日卻什麼都不能做，也沒有門診。這個現象，芝加哥大學的教授也是一樣大肆批評，他說得甚至更難聽：醫院在假日淪為旅館的功能而已。自從美國有 hospitalist 滲透到醫療體系後，這個問題才獲得改善。基本上，hospitalist 是不分平日假日在照顧病人，芝加哥醫學中心的 hospitalist 排班，primary care 的主治醫師是連續上班 7 天，才交班給另一位主治醫師，也就是

跨過假日、把假日當平常日上，唯有這樣才能解決假日品質斷層的問題。美國的經驗告訴我們的是：不可能把所有人力拉到假日上班，但醫院裡要有一組人，以 7 day - 24 hour 的模式執行連續性照顧，Hospitalist 就是最合適的人選。

4. Hospitalist 在美國發展成功後，逐漸成為亞洲和歐洲各國仿效的對象，但各國皆在草創與摸索階段，美國在 hospitalist 發展速度很快，從最初一般內科病人的照顧，到與外科 co-management、急診留觀病床（例如芝加哥西北大學醫院的 observation unit，是由 hospitalist 主導）、加護病房（hospitalist in CIU）、hospitalist 主導緩和醫療等等，在各領域一直有新的制度出現。在此建議院方能夠每隔兩年（或某一定的期間），讓本院的駐院科主治醫師到美國短期進修，看看美國在此制度上的最新趨勢，尤其是新加入 hospitalist 團隊但尚未出國的新進醫師，讓他們有機會一探美國 hospitalist 的盛況，也藉由這個方式，讓台大的 hospitalist 能跟上美國的腳步，保持領先。

結語及誌謝

感謝院方以及創傷醫學部促成，讓我能夠有機會見視到美國現今 Hospitalist 制度的現況及趨勢，希望以上的報告能提供院方一些改革的參考。


附件

附件一、對科內之出國進修簡報

附件二、芝加哥大學醫學中心 Hospitalist Service Rules (2011 版)

< 附件 - >

Hospitalist Program in Chicago 2011



Part 1

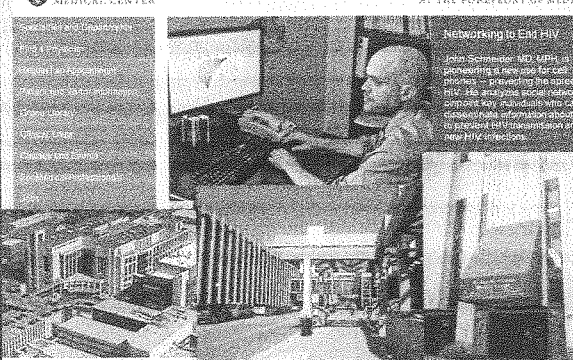
Nin-Chieh Hsu M.D.

Part 1

AT THE UNIVERSITY OF CHICAGO MEDICAL CENTER

Networking to Eliminate HIV


John Schinnerer, MD, MPH, is presenting a new idea for reducing the spread of HIV. His analysis shows that a network of physicians who are trained in the use of new HIV medications...



UChicago Medical Center

- Built in 1927
- 541-bed general medical and surgical facility
- Located in southern Chicago
- 12 adult and 9 pediatric specialties
- 25,299 admissions in the most recent year
- Performed 11,720 annual inpatient and 10,153 outpatient surgeries
- Emergency room had 73,921 visits per year

Section of Hospital Medicine



- Model was started by David Meltzer since 1997
 - 2 hospitalists with internist background
 - Each worked for 6 months per year
 - All weekends covered by traditional general internist
 - Compare hospitalists and traditional academic internists

Effects of Physician Experience on Costs and Outcomes on an Academic General Medicine Service: Results of a Trial of Hospitalists

David Meltzer, MD, PhD, William G. Manning, PhD, Josephine Sherman, MD, Martin N. Satal, MD, Lei Jin, KA, Todd Geisl, MD, and Wendy Levinson, MD

Background: Hospitalists may increase costs and improve outcomes in hospitalized patients, but existing evidence is limited and has not identified mechanisms for such effects.

Objective: To study the costs and outcomes for patients on an academic general medicine service assigned to internists or hospitalists and subspecialists.

Design: Cohort study.

Setting: Academic general medicine service.

Patients: 6011 patients admitted to the hospital from July 1997 through June 1999.

Intervention: All patients admitted every fourth day were assigned to 1 of 2 hospitalists caring for inpatients 6 months each year or 1 of 18 subspecialists caring for inpatients 1 to 2 months each year.

Measurements and Main Results: Length of stay, inpatient costs, and 30-, 60-, and 90-day mortality.

Conclusions: Patients assigned to hospitalists (34.6%) had median payments (US\$2,210) that were 6% higher than those assigned to subspecialists (US\$2,100). In year 1, average adjusted length of stay was 0.23 day longer for patients cared for by hospitalists than by subspecialists (95% CI = 0.04 to 0.45 day, $P = 0.02$); in year 2, average adjusted length of stay was 0.49 day shorter for patients cared for by hospitalists (95% CI = 0.19 to 0.85 day, $P = 0.002$) than by subspecialists. Average adjusted costs were not significantly different for hospitalists compared with subspecialists in year 1 but were reduced by \$782 in year 2 (CI = -\$1,173 to -\$587, $P = 0.001$). When years 1 and 2 were combined or when year 2 was analyzed alone, 30-day mortality was not significantly different for hospitalists and subspecialists, however, 30-day mortality was 4.2% for hospitalists compared with 6.0% for subspecialists in year 2 (CI for difference, 1.8 percentage points [-2.4 to 5.1 percentage points]; $P = 0.04$) and the adjusted relative risk was 0.69 (CI, 0.46 to 0.96; $P = 0.002$). In multivariate analyses, resource use decreased with the physician's cumulative experience in caring for a patient's primary diagnosis. Specialty showed a similar pattern. **Conclusions:** Hospitalist care was associated with lower costs and short-term mortality in the second year and the first year of hospitalists' experience. Disease-specific physician experience may affect resource use and improve patient outcomes. In addition, it may be an important determinant of the effectiveness of hospitalists.

Keywords: hospitalists; costs; mortality; physician experience; academic general medicine service.

See abstracts on pp 859-865 and editorial comment on pp 920-921.

Table 1. Length of Stay and Costs

Variable	Year 1	Year 2	Difference Between Year 1 and Year 2	P Value for Difference
Adjusted length of stay (days)	4.97	4.48	-0.49	<.001
Adjusted inpatient costs (US\$)	1,914	1,836	-78	.037
Adjusted relative risk for mortality	1.00	0.69	-0.31	<.001
Relative risk for mortality (95% CI)	1.00	0.69 (0.46-0.96)		
Relative risk for mortality (95% CI)	1.00	0.69 (0.46-0.96)		
Relative risk for mortality (95% CI)	1.00	0.69 (0.46-0.96)		

Table 3. Effects on Mortality

Variable	Year 1 and 2	Year 2	Year 2 Relative Risk (95% CI)	P Value for Difference
Adjusted length of stay (days)	4.97	4.48	0.51 (0.23-0.79)	<.001
Adjusted inpatient costs (US\$)	1,914	1,836	-78 (-117 to -39)	.001
Adjusted relative risk for mortality	1.00	0.69	0.69 (0.46-0.96)	<.001
Relative risk for mortality (95% CI)	1.00	0.69 (0.46-0.96)		

跌跌撞撞的歷史

- Experience matters ! But burn-out eventually !
- "People can choose other job if this job sucks!"
- In the long run, "sustainability" matters !
- Ask ourselves:
 - "What does this job look like ?"
 - "What kind of hospitalist do we need ?"



David Meltzer 簡介



- 具有MD身份的health economist, 任教於Harris school of Public health and Policy
- 10多個博士班學生
- 常應邀各種醫療政策會議
- Schedule滿檔: 以30分鐘為單位的meeting
- 每月一次section meeting, 其他是私下各別和部屬meeting
- 精神領導, 臨床事務交由Elmer Abbo

Elmer Abbo



- 8th year hospitalist
- 擔任科內clinical operator
- 管理人員招募、制度設計、排班、與各科合作細節
- Create "point schedule" to define a sustainable job for individuals



Sustainability



- "Sustainability" is a balance of
 - Volume
 - Complexity
 - Autonomy / respect
 - Hours of work
 - Salary
- 無法平衡, 就會burn-out → quit
- 自己做如此, 和別人合作能不能長久, 也是看這個

Define "burn-out"



- 不管對老闆來說是甚麼，對下面的人來說hospitalist就只是一個工作(job)
- 一旦有burn-out的感覺，最後人們通常選擇換工作
- 當一個hospitalist感覺自己是一個resident，代表你準備burnout了
- 尤其是和別科合作時，要注意別讓hospitalist淪為resident (失去 autonomy/respect)

目前科內概況

- 人員
 - 17位hospitalist (有6位是2011年7月到任)
 - 7位NP
 - 1位research assistant leader 帶領4位RA
- 病房及系統
 - hospitalist與general internal medicine和medical oncology共用病房
 - 絕大多數病人來自急診，急診無留觀區
 - "Cap": 內科住院醫師達上限，由hospitalist協助收床

上班方式

- 白班 (Day): 7:30am – 5pm, 掛名主治醫師，有三種team
 - Medicine: 帶NP, 10-15 beds
 - Teaching: 帶領resident, intern, 醫學生, 10-15 beds
 - Liver: 帶NP, comanagement
- Consult service: 7:30am-5pm, 接受外科系的內科問題照會
- 小夜班 (Bridge): 3pm-11pm, 接admission主力
- 大夜班 (Night): 7:30pm-7:30am, 值班，最累的一班，點數2倍
- 訂有Attending service rules, 公告於網路

排班系統

- Point schedule: (也許不是創新，但發揚光大)
 - 把各種班別用點數衡量，盡量做到點數一致
- 開發應用:
 - 計算總共需要多少人力
 - 找出standard job長什麼樣子
 - 算出gap，設法解決
 - 設計不同套餐
 - 瞭解目前需要招募的人力

Point Schedule

	Fits month	months	Total points
Days	12	24	288
Consults	8	12	96
Bridge	10	12	120
Nights	15	12	180
Mercy/Mercy	8	20	160
Mercy UC	7	4	28
Gens	5.5	12	66
			938

Extra Service and Jeopardy Payment Schedule

Shift	Jeopardy, day 1	Jeopardy, days 2-7 of same week	Scheduled ESP, day 1	Scheduled ESP, days 2-7 of same week
Nights	1200	1200		1200
Days-Liv:	900	800	900	800
Bridge	650	600		600
Consults	500	450	450	400
Mercy	800	450		\$8500 for half month
UC Gens	450	400	400	350
Overflow: ESP	\$80/pt above cap (days: 5 NPA=17, 4 NPA=16, 3 NPA=15, 2 on consults)			
Days Surge	\$500 for 5 pts and then \$50/pt above 5			

Point schedule example

2 Ward-Nights Breakdown

Daytime	8 to 17	Points	Shift	Total Pts
Long weekend	17 to 20	0.25	104	26
Bridge	18 to 25	1	260	260
Night M-Thr	23 to 6	1.5	208	273
Night Fri	23 to 6	1.75	92	91
Night Sat/Sun	22 to 8	2	194	208
			2050	2374 (938)

Daytime	Shifts	Pure Wks	Act Wks	Points
Daytime	112	16	16	112
Long weekend	8		9	2
Bridge	20	2.83	4.00	20
Night M-Thr	18	2.3	4.00	27
Night Fri	6	0.8	4.00	9
Night Sat/Sun	8	1.1		18
Total	180	22.86	28.00	178

People	12,64487
Hired	12
Cap	178
6 people	42.5
5 people	35.6
8 people	15,6667
7 people	15,6514
6 people	14.77

Weeks Any off	28.00	point gap
Weekends off	28.00	
Wks Off-hour	8.56	

How many should be hired ?

Standard job look like ..

The gap for people who want to do more ?

班表

Mon	Tue	Wed	Thu	Fri	Sat
1 Jeopardy: M. Pao 2. Day 3. Calderon 4. M. Pao 5. Calderon 6. M. Pao	7 Jeopardy: M. Pao 8. Day 9. Calderon 10. M. Pao 11. Calderon 12. M. Pao	13 Jeopardy: M. Pao 14. Day 15. Calderon 16. M. Pao 17. Calderon 18. M. Pao	19 Jeopardy: M. Pao 20. Day 21. Calderon 22. M. Pao 23. Calderon 24. M. Pao	25 Jeopardy: M. Pao 26. Day 27. Calderon 28. M. Pao 29. Calderon 30. M. Pao	31 Jeopardy: M. Pao 1. Day 2. Calderon 3. M. Pao 4. Calderon 5. M. Pao

Long Day / Moonlight

- Long day: 白班繼續上5pm-8pm，延後下班
- 新實驗的制度
- 直接交班給night (7:30pm-7:30am)，讓bridge好好接新病人
- Weekend float (Moonlight):
- 兼差打工，上假日班，幫忙share loading
- R2-R3或fellow皆可

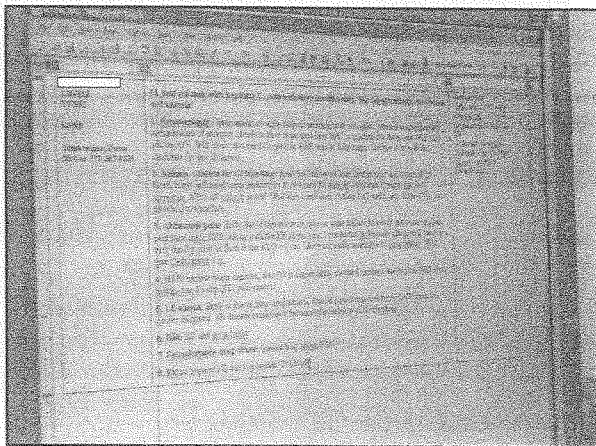
Jeopardy

- 因應臨時狀況 (sick, family emergency) 的代班
- 三種方案:
- Mandatory without pay
- Mandatory with pay
- Voluntary with pay (most current)
- 代班者有extra-pay

Handoff / Sign-out

	0730-1700	1700-2000	2000-2300	2300-0730
Day1		Bridge	Bridge	Night
Day2		LG	Night	Night
Teaching	-	-	-	-
Consult		Bridge	Bridge	Night

- Day (0730-1700) · Bridge (1500-2300) · Night (1930-0730)
- 每天7:30am交班會議，Night交給Day及consult
- 普遍認為Night shift上班時間最長，最辛苦



Patient type

- Overflow
 - General medicine overflow
 - General cardiology overflow
 - Liver transplant patient overflow
 - Solid tumor oncology pt overflow
- Solid tumor oncology overflow
 - Admit from cap of housestaff to arrival of moonlighters (6 pm weekday, noon weekend)
 - Admit worked up pts from moonlighter to am if incoming day team near or at cap
 - We do not take liquid tumor
 - Liquid tumor includes all leukemia/MDS, lymphoma, and multiple myeloma
 - Coverage for these pts is as follows:
 - Leukemia/MDS
 - HOHC leukemia hospitalist during day, moonlighter at night
 - Lymphoma, multiple myeloma
 - general HONC housestaff service until capped, then MRCC to 6 pm, then moonlighter

NP's role

NPA staffing

- o General responsibilities
 - carry service pagers
 - write notes and orders
 - interact with consultants
 - coordinate discharge planning
 - dictations
 - procedures as skill and time available
- o Full staffing is 4 NPAs on weekdays, none on weekends or holidays
 - NPAs report to either attending
- o Pager structure

L Service	Attending	M service
6111		8000
6116	NPA 1	8118
6226	NPA 2	8228
6336	NPA 3	8338
6556	NPA 4	8558
6776	NPA 5	8778



Section of Hospital Medicine September, 2011

Evolving Service Rules

Service Rules

Subspecialty Days Service

- L service
 - o All liver should be preferentially given to L
 - All liver, including pre- and post-liver transplant
 - In general, pts followed by liver service as outpt or approved by liver
 - Undiagnosed initial presentation of liver disease may go to general medicine on discretion of General Medicine Inpatient Flow Director
 - o Renal transplant, shared with M
 - All post-renal transplant pts not on hemodialysis at time of admission
 - o General medicine overflow (see below), shared with M
 - o General cardiology overflow (see below), shared with M
 - o IR, shared with M
 - All IR pts requiring admission for post-procedure
 - o Backs up day M atlg, particularly weekend mornings, if pt is unstable and/or help needed
- M service
 - o All solid tumor oncology overflow (see below) should preferentially go to M
 - o Renal transplant, shared with M
 - All post-renal transplant pts not on hemodialysis at time of admission
 - o General medicine overflow (see below), shared with L
 - o General cardiology overflow (see below), shared with L
 - o IR, shared with L
 - All IR pts requiring admission for post-procedure

Education / Meeting

Upcoming Meetings

Section iPad Training

Sunday, December 5, W300 Conference Room, 12:00-1:00pm

Grand Rounds

Emerging Challenges in the New Era of Hepatitis C Therapy
Andrew Arnosohn, MD, Assistant Professor, Section of Gastroenterology
"Sleep, Breathing and the Heart"
Babak Mokhtari, MD, MSc, Associate Professor, Section of Pulmonary and Critical Care Medicine

Tuesday, December 6, Billings Auditorium P107, 12:00-1:00pm

Outcomes Research Workshop

Speaker: Dana Siskind, MD

Updates on Project ASPIRE and TSM Behavior Change Interventions

Wednesday, December 7th, W300, 8:30-9:45am

MacLean Center Ethics Seminar Series

"Professional Identity and the 'Good' Physician in Nineteenth-Century

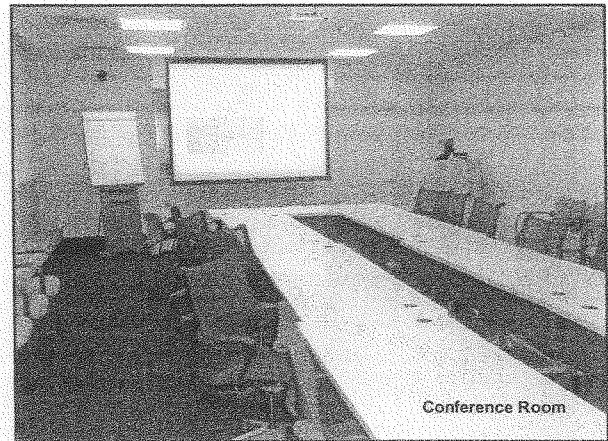
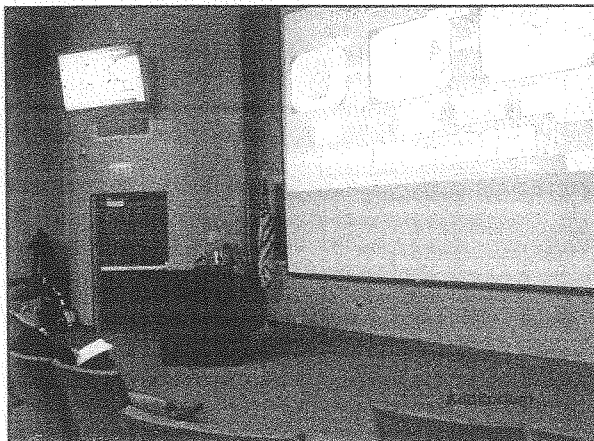
America"

John Harley Warner, Ph.D, Yale University

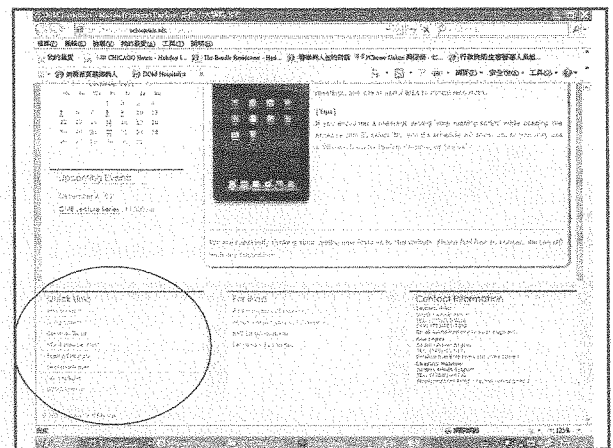
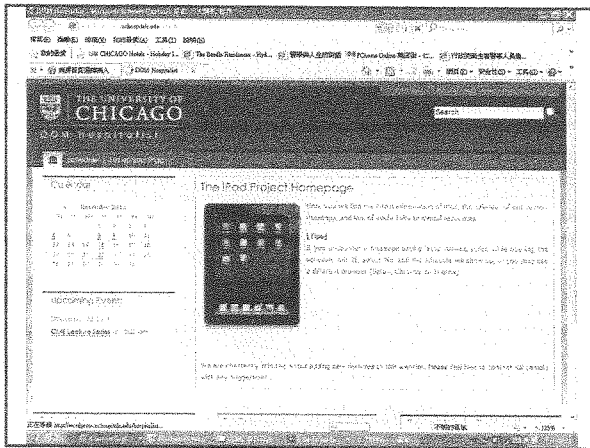
Wednesday, December 7th, H103, 12:00-1:15pm

Section Research Meeting

Thursday, December 8, W300 Conference Room, 12:00-1:00pm


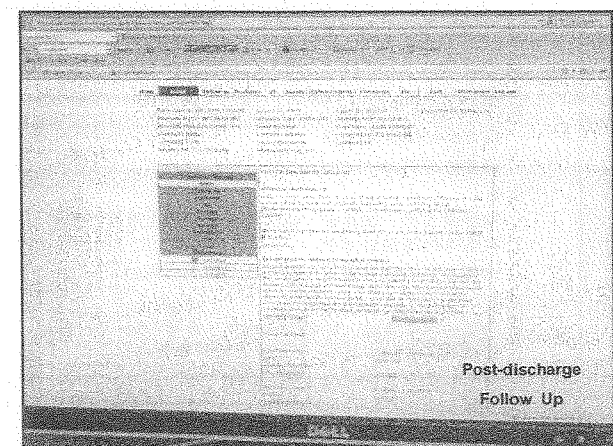
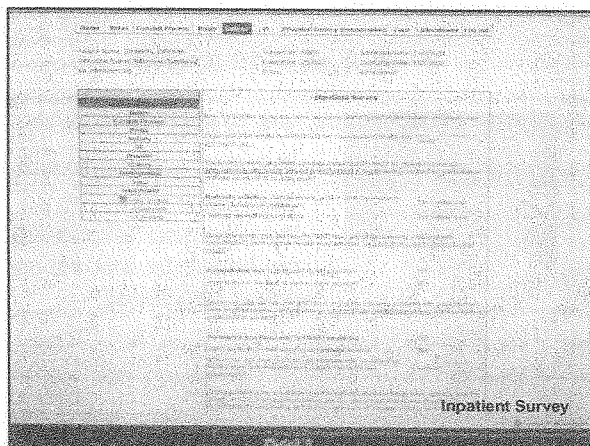
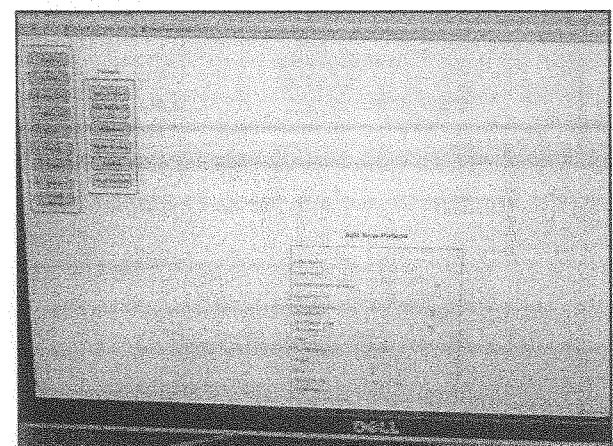


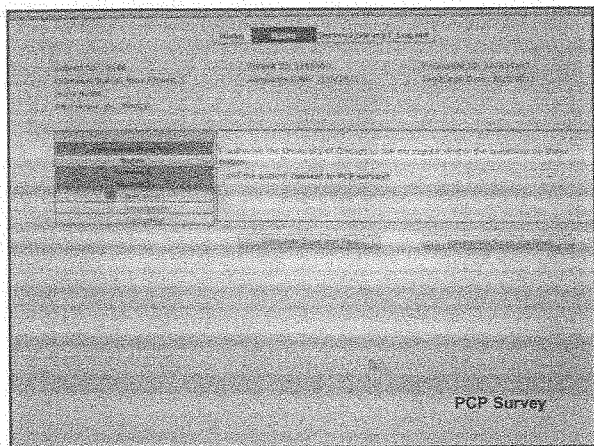
Conference Room



Research

- 1 research assistant leader
- 4 research assistant (RA)
- 工讀生: students
- Projects:
 - Inpatient
 - Abstraction (VE)
 - Follow-up
 - PCP
 - ESM (pain control)
 - Sleep
- Cooperative projects



HOSPITALIST INPATIENT INTERVIEW FORM

Subject Number: _____ (If last digit=5 or score on page 7 is 3 or more, then fill out top portion of PCP fax survey and explain to patient) PCP survey top filled out Last digit =5 or patient score is <3

Site: University of Chicago Medical Center _____ Mercy Hospital _____

Patient's Name: _____ Last _____ First _____ Room # _____ Bed _____

Patient ID Number: _____ Date of Birth: _____

Encounter ID Number: _____

Social Security Number: _____ Sex: M / F

Interview Date: _____ Interviewer: _____

Floor/Covering Attending: _____ Service Attending: _____

Floor/Covering Resident: _____ Service Team Resident: _____

Floor/Covering Intern: _____ Service Intern: _____

Admission Source: 1) UC ER _____ 2) Clinic _____ 3) Scheduled from home _____

4) Transfer from acute care hospital _____ 5) Transfer from skilled nursing facility _____

6) Transfer from other service _____ (Specify: _____) 7) Other _____ (Specify: _____)

8) Transfer from UC ED to Mercy _____ 9) Transfer from Mercy ER _____ 10) Direct Admit from UC Clinic to Mercy _____

11) Transfer from other Mercy Service _____ (Specify: _____)

Total 20 pages → 30 min interview using iPad

HOSPITALIST INPATIENT INTERVIEW FORM
MENTAL STATUS^{1,2}

Introduction: These questions are **practice** cues used to identify those patients who are too ill to participate in the interview. Please do not get upset if some of them seem either too simple or too difficult.

	Incorrect	Correct
1 a) What year is this? _____	0	1
b) What season is this? _____	0	1
c) What month is this? _____	0	1
d) What is today's date? _____	0	1
e) What day of the week is this? _____	0	1
f) What state are we in? _____	0	1
g) What county are we in? _____	0	1
h) What city are we in? _____	0	1
i) What hospital are we in? _____	0	1

number correct _____

2. I am going to name three objects and I want you to repeat each one after I say it.
Apple, Penny, Table.

Please try to remember these three words. I will be asking you to repeat them back later.

number correct _____

One Month Follow-Up (FA) Telephone Survey

B. Data filled out by Interviewer:

Hello, my name is _____ and I am calling on behalf of Mercy Hospital. For this survey, I need to speak with (PATIENT'S name PRONY'S name) about his/her PATIENT'S hospitalization at Mercy Hospital. Is Mr./Mrs. (PATIENT'S name PRONY'S Name) available?

(Don't read this portion, but determine patient status)-

Patient status:-

Known Alive -- Telephone Contact _____ 1*

Deceased _____ 2*

Unknown _____ 3*

1* If deceased, I'm sorry, when did Mr./Mrs. (patient's name) pass away? _____

Month: Day: Year: _____

I'm very sorry. Thank you for your time (HANG UP AFTER PAUSE).

2* If not available, When would be a good time to reach (patient's name)? _____

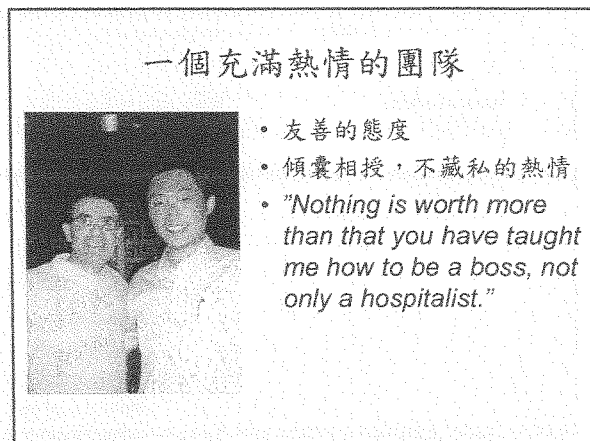
Date of Next Contact: _____ Time of Next Contact: _____

Thank you, I will try back at that time.

3* If patient is available:

Total 17 pages → 由工讀生call out按表填寫

- ## UCMC 參訪心得
- 他們找到生存關鍵：
 - 處理 overflow patient
 - 與其他科部 co-management
 - 強項：
 - 把排班當作一個技術，認真研究，人性化管理，薪水較低但仍能吸引人才
 - 結構良好的研究團隊，建立龐大的 database
 - 弱項：
 - 醫院的 IT 起步晚，影響臨床效率，今年 7 月加入一個懂資訊的 hospitalist，開始著力於 IT 發展
 - 沒有制度化的 training program
 - 負責 quality improvement 的教授 9 月份才剛回來



< 附件二 >

Section of Hospital Medicine September, 2011

Service Rules

Subspecialty Days Service

- L service
 - All liver should be preferentially given to L
 - All liver, including pre- and post-liver transplant
 - In general, pts followed by liver service as outpt or approved by liver
 - Undiagnosed initial presentation of liver disease may go to general medicine on discretion of General Medicine Inpatient Flow Director
 - Renal transplant, shared with M
 - All post-renal transplant pts not on hemodialysis at time of admission
 - General medicine overflow (see below), shared with M
 - General cardiology overflow (see below), shared with M
 - IR, shared with M
 - All IR pts requiring admission for post-procedure
 - Backs up day M attg, particularly weekend mornings, if pt is unstable and/or help needed
- M service
 - All solid tumor oncology overflow (see below) should preferentially go to M
 - Renal transplant, shared with M
 - All post-renal transplant pts not on hemodialysis at time of admission
 - General medicine overflow (see below), shared with L
 - General cardiology overflow (see below), shared with L
 - IR, shared with L
 - All IR pts requiring admission for post-procedure
 - All IR pts requiring admission for post-procedure
 - All IR pts requiring admission for post-procedure
 - Covers consult pager from 7:30 to 8:30 am
 - Includes weekend cross-cover on lung transplant for this time
 - See Lung Transplant relationship section for details
 - Rapid Response Team
 - Respond to RRT calls in person or page 7320 (critical care charge RN), attend calls as needed and assist with management including shepharding transfer to MICU if necessary
 - Backs up day L attg, particularly weekend mornings, if pt is unstable and/or help needed
- General Medicine overflow
 - Take all non-MICU gen med after intern #1 caps
 - If take 2 or more gen med prior to 7 pm (or if greater than 2 pts not worked up at 7 pm), then return pager to GENS resident at 7 pm for intern #2
 - If have admitted less than 2 gen med prior to 7 pm, then assume or maintain GENS pager until 9 pm or until 2 pts admitted, whichever is first.
 - Take all non-MICU gen med after intern #2 caps
 - MICU pts to be managed by MICU service until next intern available (or by resident without intern)
 - At discretion of attg can accept MICU transfer if ICU is being overwhelmed

- General Cardiology
 - Take gen cards after day housestaff team closes until 8 pm
 - Take gen cards after night housestaff closes
 - Take worked up gen cards from night housestaff in am if admitted more than 3 pts and/or overnight admissions cap or nearly cap incoming day housestaff team
 - In general, no subspecialty cardiology
 - subspecialty cardiology is
 - Pulmonary hypertension
 - Heart transplant
 - Advanced heart failure on home inotropes
 - We do take heart failure not on home inotropes and EP
 - After intern caps, subspecialty cards is admitted by resident admits alone (or MROC)
- Solid tumor oncology overflow
 - Admit from cap of housestaff to arrival of moonlighters (6 pm weekday, noon weekend)
 - Admit worked up pts from moonlighter in am if incoming day team near or at cap
 - We do not take liquid tumor
 - Liquid tumor includes all leukemia/MDS, lymphoma, and multiple myeloma
 - Coverage for these pts is as follows:
 - Leukemia/MDS
 - HONC leukemia hospitalist during day, moonlighter at night
 - Lymphoma, multiple myeloma
 - general HONC housestaff service until capped, then MROC to 6 pm, then moonlighter
- Admitting and Service hours
 - 7:30 am to finish staffing primary patients
 - Weekday admit new pts/consults until 3 pm
 - Weekend/holidays admit new pts/consults until noon
 - If stable, pt can be held for bridge if close to cut-off
 - Skeleton orders and more urgent issues in care should be addressed
 - Admitting pager 9100
 - NPAs will carry admission pager from 7:30 to 3 pm on weekdays
- NPA staffing
 - General responsibilities
 - carry service pagers
 - write notes and orders
 - interact with consultants
 - coordinate discharge planning
 - dictations
 - procedures as skill and time available
 - Full staffing is 4 NPAs on weekdays, none on weekends or holidays
 - NPAs report to either attending
 - Pager structure

L Service		M service
6111	Attending	8000
6116	NPA 1	8118
6226	NPA 2	8228
6336	NPA 3	8338
6556	NPA 4	8558
6776	NPA 5	8778

- Absences
 - During weeks of vacation or other excused absences, there may only 3 NPA services on weekdays, none on weekends or holidays
 - In general, NPAs will not schedule vacations on the same week, but conferences or other contingencies (maternity leave) may result in more than 1 NPA missing that week
 - In these situations, every effort will be made to have at least 3 NPAs present, in which case all NPAs will work with both L and M services
- Most patients on non-holiday weekdays will be staffed by NPA but there may be times in peak census when attg may have to staff independently
- NPA only staffing
 - Should be very limited
 - May be utilized when census is high if pt is stable
 - Attending supervision of clinical status must be provided (review vitals, labs, and plan w/ NPA)
 - Should not be utilized if
 - New admissions (including overnight admissions seen by bridge/nights)
 - First day of service as a rule unless pt to be discharged and pt known to NPA
 - Must see pt if NPA specifically requests pt to be seen by attg
 - If pt not seen by attg, must communicate to NPA to bill pt independently and attg must confirm NPA billed by email
- Service capacity and surge
 - In general, L and M are designed to handle up to 15 pts with some surge to 16-17 pts depending on NPA coverage, and consults is expected to do up to 2 pts in overflow
 - Specifically, rules as follows per table below

	Days Cap	Consults Cap	Admitting Order	Total Census
5 NPAs	17 pts	2 primary pts	Each day takes 17, then consults next 2	36
4 NPAs	16 pts	2 primary pts	Each day takes 16, then consults next 2	34
3 NPAs	15 pts	2 primary pts	Each day takes 14, then consults next 2, then each day takes 15 th pt	32
2 NPAs	14 pts	2 primary pts	Each day takes 14, then consults next 2	30
Wkends	16 pts	2 primary pts	Each day takes 16, then consults next 2	34

- Overflow ESP
 - \$50 per pt per day above standard capacity levels above
 - Can be claimed by either day attending or consults, with both days attgs having option of first refusal
 - Must notify Director of Clinical Operations in am by page with follow-up email stating pt names and MRs to claim
- Activating surge jeopardy
 - Only to be activated by Director of Clinical Operations (if attempted to contact and unsuccessful, may implement and notify later)
- Overflow on consults
 - Consults only takes pts in the morning
 - Consults holds onto pts as long as on service
 - When going off-service
 - Pts should be absorbed onto days service unless pushes days service above caps
- L/M Service Balance
 - Try to keep livers on L and oncology on M, but . . .
 - If before any assignments, either service has 4 or more patients or census of 15, then
 - Non-liver and non-oncology pts should be given preferentially in proportion to lower census service first,
 - Then liver to L and oncology to M, up to difference of 4 pts or census of 15
 - Then additional liver to M and additional oncology to L to minimize imbalance

Weekend Float

- 1 person shared between L/M from 7:30 am to 12:30 pm on weekends and holidays, scheduling permitting
 - Either an NPA, a 2nd or 3rd yr resident, or a fellow
- Responsibilities
 - See new overnight admissions and present to attending
 - make sure patients are stable and being managed appropriately
 - call all new consults
 - write notes, if necessary
 - enter orders and arrange for any studies, if necessary
 - On Sundays, staff pts previously seen on Saturday and present to attending.
 - See new admissions or consults and present to attending
 - May assist with procedures.
 - Assist in critical care situations
 - Otherwise assist attendings as time is available.

Bridge

- Responsibilities
 - Primarily responsible for new admissions and new consults starting at 3 pm
 - NPAs may assist if available but NPAs primary responsibility is to complete staffing of day service pts
 - Cross-cover 5:30 pm to 7:30 pm weekdays if no late NPA & noon to 7:30 on weekends
 - Update overnight signout prior to end-of-shift
- Weekdays
 - 3 pm to 11 pm
 - Begins admissions at 3 pm
 - Days attending may pass off any unstaffed new admission within reason
 - Assumes consults at 3 pm
 - Cross-cover on lung transplant starting around 5 pm
 - See Lung Transplant relationship section for details
 - Last time for fully completing new admissions or consults at 10 pm
 - May still begin admissions after 10 pm but not expected to have all aspects complete prior to leaving
 - Should check-in with days at 3 pm, assume 9100 at 3 pm, and assist as needed
- Weekends (Sat/Sun)
 - Noon to 8 pm
 - Begins admissions, consults, cross-cover on lung tx at noon
 - Days may pass off any new admissions excluding new overnight admissions
 - Days may ask for assistance as needed
 - Last time for fully completing new admissions or consults at 7:00 pm
 - May still begin admissions after 7:00 pm but not expected to have all aspects complete prior to leaving
- Must be on-site for full duration, no leaving early
 - Must arrive ready to work (3 pm weekdays, noon weekends)
 - Must call 9100 promptly and assume any outstanding/necessary work
 - No academic meetings may be scheduled while on bridge
 - Clinical work must take precedence to ongoing administrative meetings that you otherwise would normally attend
- Please see rules for admitting under Days Service

Nights

- 7:30 pm to 7:30 am
- All cross-cover on day service pts
- Assists bridge with admissions and consults from 7:30 pm to 10 pm
- All new admissions and consults from 10 pm to 6:30 am
- Last time for fully completed new admissions or consults at 6:30 am
 - May still begin after 6:30 am but not expected to have all aspects complete prior to leaving
 - ER holding allowed
 - Pts called in for admission after 5:30 am may be held in ER for day team, definitely hold in ER for pts after 6:30 am
- IBD cross-cover and admitting (pager GIBD)
 - Assumes GIBD pager from 6 pm to 7 am
 - Admits pts w/ pathologically confirmed IBD (UC or Crohn's) and hand off to IBD fellow in am
- All listed and post-lung transplant pts excluding immediate post-op care: cross-cover and new admissions
 - See Lung Transplant relationship section for details
- Please see rules for admitting under Days Service
- Update overnight signout by 7 am
- Evening sign-in with late NPA
 - If an NPA is staying until 7:30 pm and nights does not arrive by 7:30 pm, the NPA may transfer pagers to the bridge person, leave written signouts in NPA office, and if patients are currently stable, the late NPA may leave at 7:30 pm but she/he should page nights with a cell phone contact number for verbal signout and should notify bridge that they are physically leaving the hospital but will give signout verbally to nights by phone and move pagers to bridge. Pagers will be assumed by nights as soon as nights arrives.

Consults

- Daytime Coverage
 - Weekdays
 - 8:30 am to finish staffing primary consults
 - Last new consult time at 4 pm
 - Sign out to bridge after completion of all new and subsequent visits
 - Consult attending should remain available by pager until 6pm if issues arise
 - Weekends (Sat/Sun)
 - 8:30 am to finish staffing primary consults
 - New consults until 11:30 am
 - Sign out to bridge at or after 12:00 pm
- Evening & Nighttime Coverage
 - Before midnight, all new consults should be staffed and billed
 - Between midnight and 8:30 am:
 - New consults should be divided into urgent and non-urgent consults
 - All urgent consults should be staffed overnight, including rapid preoperative evaluation
 - Non-urgent consults can be added to signout for primary consult attending to staff during daytime.
 - Bridge and nights should add all x-cover comments to online consult signout for primary consult attending to follow up during daytime
 - Between 7:30 am and 8:30 am, M attending will:
 - Cover 9000 pager
 - Non-urgent issues will be referred to consult attending on arrival
 - Respond to RRT calls and any urgent consults

- Additional responsibilities
 - Rapid Response Team
 - Respond to RRT calls in person or by paging on-call D-tower manager (RN) at 7320
 - Text page to tower manager is sufficient
 - Can request operator to text page tower manager on your behalf
 - Respond as needed and assist with management, including facilitating transfer to MICU if necessary
 - Critical care billing should be used if you respond in person to RRT
 - Surge capacity-see service capacity and surge under Subspecialty Days Service section
 - May take up to 2 days pts in overflow
 - May take additional pts for overflow ESP
- General issues
 - Consult attending should page M attending upon arrival to get any updates from morning
 - Review signout upon arrival to review comments from overnight
- Teaching
 - Anesthesiology interns, internal medicine residents, and 4th-year medical students will rotate on consult service for 2-4 week blocks
 - Residents expectations
 - Notify attending at beginning of rotation about planned absences for clinic
 - IM residents will be scheduled for afternoon clinics by chief residents
 - Chief residents must be notified **prior** to any absences for anything besides clinic
 - Hours: 8 am-4:30 pm, Monday-Friday
 - Follow no more than 7 patients
 - See new patients and old patients with most active issues
 - Attend morning report (10-11 am) and noon conference (12-1pm)
 - Present 2 brief (20-30min) reviews of topics selected by resident during 2-week rotation
 - No more than 1 moonlighting shift during a 2-week consult block per IM residency rules
 - Early dismissal by noon if worked MROC the night prior
 - Early dismissal after seeing all old patients if called for jeopardy the night prior
 - Attending expectations
 - Contact resident upon arrival to review patient list, divide patients, and establish time to round
 - During 2-week block, attendings are encouraged to review the following topics during dedicated teaching sessions:
 - Role of medical consultant
 - Preoperative cardiac evaluation
 - Perioperative medical management
 - Diabetes mellitus
 - Hypertension
 - Antibiotic prophylaxis
 - Medial prophylaxis (DVT, stress ulcers, etc.)
 - Selected reading materials for teaching will be available on hospital medicine section website

Lung Transplant Relationship

- Weekdays
 - Monday-Thursday-Transplant NP will signout to consults (pager 9000) and complete signout sheet on sandbox
 - Nights or Days to give morning signout to transplant NP weekday mornings. They should page us for info.
 - Friday- Transplant NP will signout to pager 9000 between 3-4 pm and complete signout sheet on sandbox
- Weekend mornings
 - Nights should give signout to M who gives info to consults. On arrival, consults should pass on any overnight info to lung transplant attg, text page okay if nothing major occurred.
 - LNGT pager will remain on pager 9000 through weekend
 - M/consults will do cross-cover for lung transplant in the am, seeing pts urgently and writing appropriate management orders if needed.
 - M/consults should page/text-page lung tx to update if any issues addressed as cross-cover in the am
 - M/consults may refer routine management issues to lung transplant attg via page (text-page) or by asking nurse to page lung tx attg directly.
 - M/consults will staff any new direct admissions or admissions from ER in the am until bridge arrives, including adding pt to LNGT signout
 - Lung tx is responsible for routine management and discharges
 - Transplant MD will page 9000 and sign out verbally to the on call hospitalist each day, which may be bridge at that time. Lung tx attg will not page 9000 on arrival on weekends nor will assume pager. Hospitalist should update to do column on LNGT sign-out as necessary.
- Any day
 - M/consults may be called by lung tx attg to see pt on urgent basis as a consult

Hand-Off Rules

- Days attg is exempt from strict hand-off rules and may pass off new admissions to bridge within reason
 - Days attg may not pass off new overnight admissions
- Bridge and nights must follow hand-off rules in general, except in unusual circumstances
 - Admissions, consults are assigned if on-site prior to cut-off time
 - On-site defined as within clinical area of hospital or outpt clinics
 - If admission assigned but work-up voluntarily accepted by bridge, pt stays with assigned attending on subsequent day
- Handing over pts to housestaff or moonlighter
 - Ok to hand over pts if
 - Pt is an expect but not on-site
 - Otherwise busy as defined by following guideline
 - If more than 2 unworked admissions and received >1 admission per hour starting from time of first admission
 - Preferentially hand off oncology>cardiology>general medicine

Point Schedule

	Pts/ month	months	Total points
Days	12	24	288
Consults	8	12	96
Bridge	10	12	120
Nights	15	12	180
Mercy Mercy	8	20	160
Mercy UC	7	4	28
Gens	5.5	12	66

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Extra Service and Jeopardy Payment Schedule

Shift	Jeopardy, day 1	Jeopardy, days 2-7 of same week	Scheduled ESP, day 1	Scheduled ESP, days 2-7 of same week
Nights	1250	1200		1200
Days (L/M)	900	850	900	850
Bridge	650	600		600
Consults	500	450	450	400
Mercy	500	450	\$6500 for half month	
UC Gens	450	400	400	350
Overflow ESP	\$50/pt above cap (days: 5 NPA=17, 4 NPA=16, 3 NPA=15; 2 on consults)			
Days Surge	\$500 for 5 pts and then \$50/pt above 5			