新照護模式契機

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疫情下對醫療體系的一些觀察

- 遠距/遠端服務的優點更被肯定
  - 降低感染風險
  - 提供適時處置
- 服務量下降
  - 非急迫性就醫減少
  - 是否也有必要性醫療被延後?

疫情下慢性病患者的困境

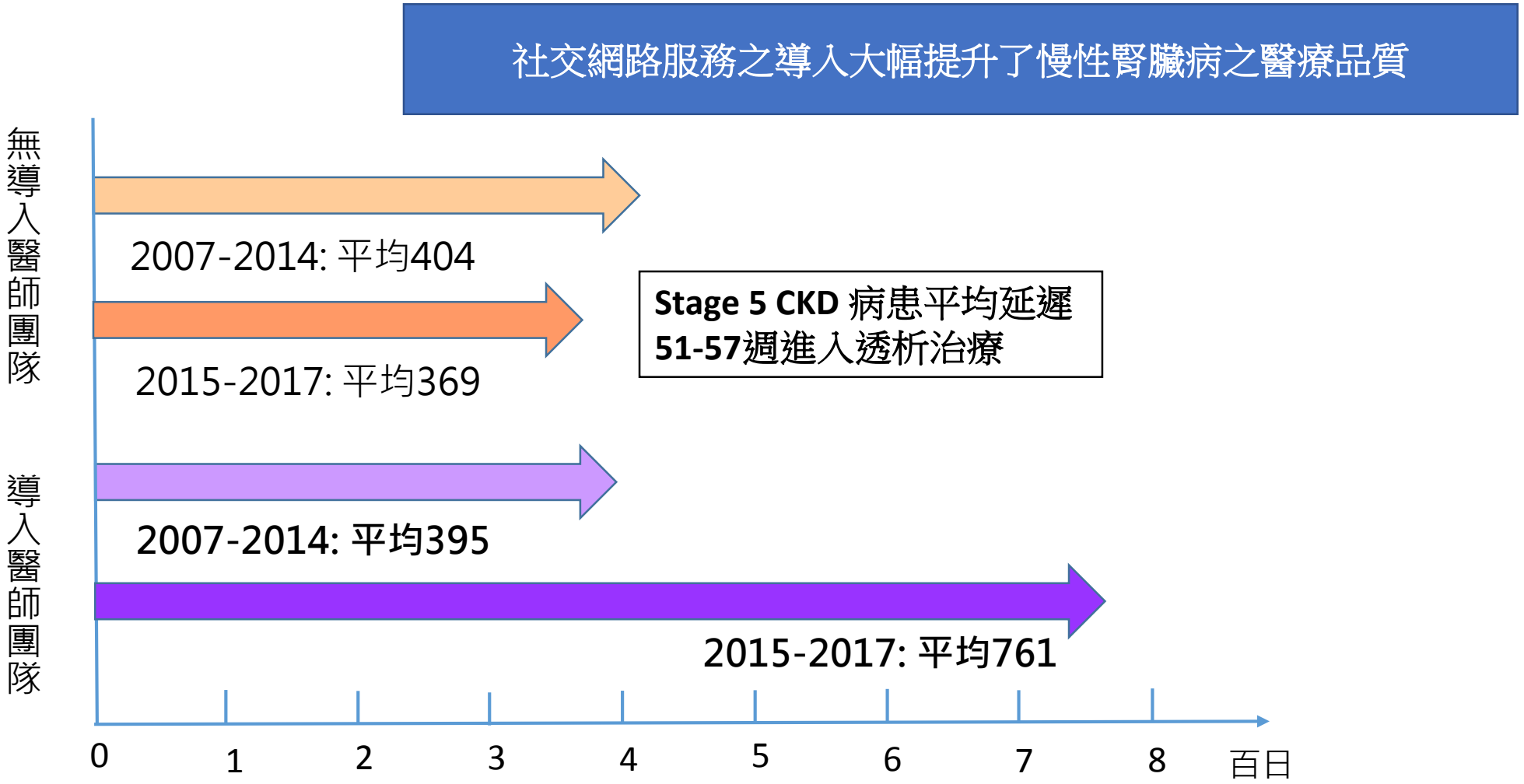
- 新冠肺炎高風險族群
- 照護需要持續性
- 在政策不鼓勵進入醫院，當慢性病患遇到問題或非常態狀況，目前的照護模式完善？

- 典範轉移思維下慢性病照護新模式的必要性

結合資通訊的主責照護模式

- 導入社交網路對於第五期慢性腎臟病患者之照護(Yang FJ, Hou YH, Chang RE*. The Impacts of a Social Networking Service-Enhanced Smart Care Model on Stage 5 Chronic Kidney Disease: Quasi-Experimental Study. *J Med Internet Res* 2020; 22(4): e15565.台大醫院雲林分院/台大公衛學院合作發表
- 醫師藉由將社交網路服務導入醫療照護系統，與患者及家屬建立聯繫，促進照護的及時性、適切性與覆蓋完整性

新照護模式效果


社交網路服務之導入大幅提升了慢性腎臟病之醫療品質
無導入醫師團隊
2007-2014: 平均404
2015-2017: 平均369
Stage 5 CKD 病患平均延遲
51-57週進入透析治療
導入醫師團隊
2007-2014: 平均395
2015-2017: 平均761
0
1
2
3
4
5
6
7
8
百日

節省醫療資源

- 台灣透析之盛行率與發生率名列世界前茅，據最新資料2016年透析之發生數為11,956人。
- 透析病患每年門診透析費用醫療平均花健保近50萬元

  (3,912*3*51*0.8424=598,534*0.8424=504,207)
- 如以平均每人每年50萬元之醫療支出與每年新增透析人數約12,000人來看，延遲一年透析可為健保支出節省60億元

慢性病使用醫療資源

- 慢性病需持續性照護耗用醫療資源大，慢性腎臟疾病、糖尿病、高血壓門診可達千億
- 新照護模式可開創出更好的健康照護品質與效益
- 台灣不缺有熱忱、肯創新、願意付出的醫師(小兒氣喘)
- 但我們是否有良好鼓勵機制讓更多醫師投入(健保支付與遠距法規)

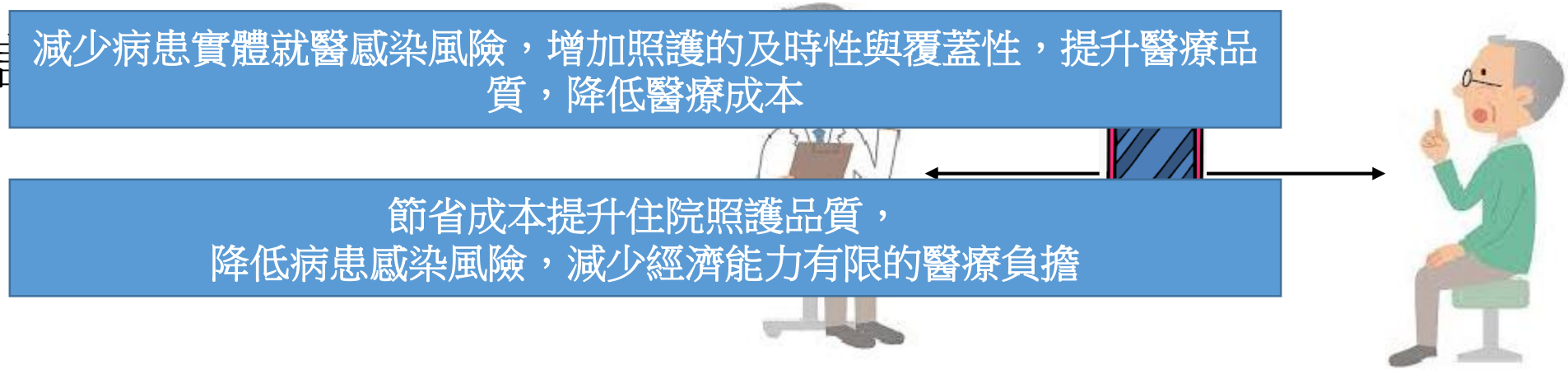
2018年全民健康保險門診醫療費用前二十大疾病

單位：千人、百萬點、點、%

排名	疾病代碼列表群組	門診就醫人數 (千人)	門診醫療費用 值(百萬點)	平均值(點)	(標準差)	占率
1	急性腎衰竭及慢性腎臟疾病	386	51,163	132,509	(242,507)	9.96%
2	口腔及唾液腺之疾病	11,637	45,184	3,883	(4,438)	8.80%
3	糖尿病	1,581	29,787	18,835	(24,114)	5.80%
4	急性上呼吸道感染	14,099	25,801	1,830	(2,406)	5.02%
5	高血壓性疾病	2,536	22,013	8,679	(11,987)	4.29%
6	腦血管疾病	412	10,170	24,672	(40,011)	1.98%
7	消化器官之惡性腫瘤	168	9,957	59,397	(130,626)	1.94%
8	食道、胃及十二指腸之疾病	3,554	9,703	2,731	(6,582)	1.89%
9	代謝性疾患	1,016	9,022	8,878	(216,373)	1.76%
10	乳房之惡性腫瘤	124	8,098	65,045	(152,572)	1.58%
11	病毒性肝炎	445	7,720	17,361	(49,254)	1.50%
12	缺血性心臟病	547	7,686	14,050	(16,066)	1.50%
13	呼吸道及胸內器官之惡性腫瘤	61	7,207	117,673	(207,372)	1.40%
14	其他背（部）病變	2,470	7,094	2,872	(5,671)	1.38%
15	慢性下呼吸道疾病	1,240	6,968	5,617	(17,571)	1.36%
16	脊椎病變	984	6,908	7,022	(19,704)	1.35%
17	影響循環及呼吸系統之症狀與徵候	3,083	6,275	2,035	(3,964)	1.22%
18	一般症狀與徵候	2,956	6,166	2,086	(5,425)	1.20%
19	（發）炎性多關節病變	741	6,150	8,295	(41,317)	1.20%
20	上呼吸道其他疾病	3,282	5,919	1,804	(3,434)	1.15%
	前20大合計	20,999	288,991	13,762	(68,019)	56.27%

改變的時機來臨了

- 結合資通訊科技遠距慢性病照護模式
- 建議增設遠距醫療慢性病之支付制度，將遠距醫療從偏鄉地區延伸至慢性病之照護
- 建立主治醫師與病患及親屬快速溝通之管道，使主治醫師提供最及時與適切的照護訊息與規劃
- 主責、信



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JOURNAL OF MEDICAL INTERNET RESEARCH Yang et al

Original Paper

The Impact of a Social Networking Service–Enhanced Smart Care Model on Stage 5 Chronic Kidney Disease: Quasi-Experimental Study

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Abstract

Background: Stage 5 chronic kidney disease (CKD) presents a high risk for dialysis initiation and for complications such as uremic encephalopathy, uremic symptoms, gastrointestinal bleeding, and infection. One of the most common barriers to health care for patients with stage 5 CKD is poor continuity of care due to unresolved communication gaps.

Objective: Our aim was to establish a powerful care model that includes the use of a social networking service (SNS) to improve care quality for patients with CKD and safely delay dialysis initiation.

Methods: We used a retrospective cohort of CKD patients aged 20-85 years who received care between 2007 and 2017 to evaluate the efficacy of incorporating an SNS into the health care system. In 2014, author F-JY, a nephrologist at the National Taiwan University Hospital Yunlin Branch, started to use an SNS app to connect with stage 5 CKD patients and their families. In cases of emergency, patients and families could quickly report any condition to F-JY. Using this app, F-JY helped facilitate productive interactions between these patients and the health care system. The intention was to safely delay the initiation of dialysis therapy. We divided patients into four groups: group 1 (G1) included patients at the study hospital during the 2007-2014 period who had contact only with nephrologists other than F-JY, group 2 (G2) included patients who visited F-JY during the 2007-2014 period before he began using the SNS app, group 3 (G3) included patients who visited nephrologists other than F-JY during the 2014-2017 period and had no interactions using the SNS, and group 4 (G4) included patients who visited F-JY during the 2014-2017 period and interacted with him using the SNS app.

Results: We recruited 209 patients with stage 5 CKD who had been enrolled in the study hospital's CKD program between 2007 and 2017. Each of the four groups initiated dialysis at different times. Before adjusting for baseline estimated glomerular filtration rate (eGFR), the G4 patients had a longer time to dialysis (mean 761.7 days, SD 616.2 days) than the other groups (G1: mean 403.6 days, SD 409.4 days, *P*=.011 for G4 vs G1; G2: 394.8 days, SD 318.8 days, *P*=.04; G3: 369.1 days, SD 330.8 days, *P*=.049). After adjusting for baseline eGFR, G4 had a longer duration for each eGFR drop (mean 84.8 days, SD 65.1 days) than