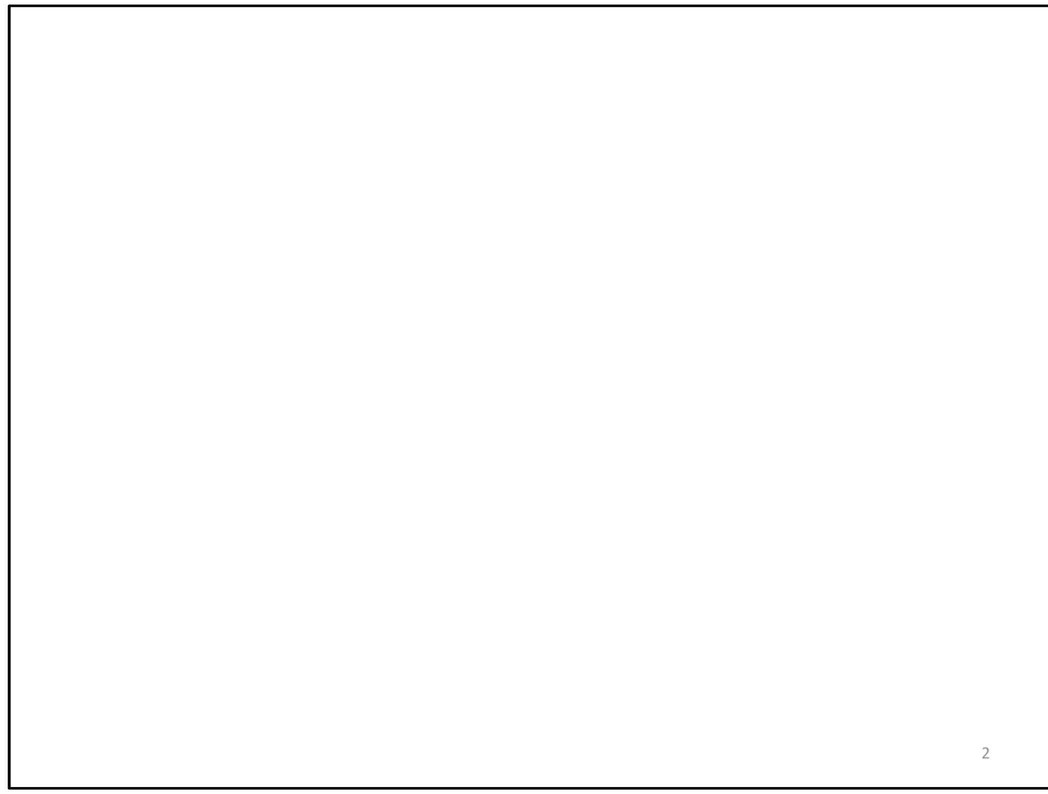
趙偉翔科長：署長、各位長官大家早，110年健保署英文專書讀書會第七場(含加值場次)，首先我們先請主席致詞。

李伯璋署長：各位同仁大家早安，很快的中秋節過了，大家平常心，有事不能來上課也沒關係，不要有壓力，其實我們自己署裡面很多同仁還有各分區都有參加這樣的學習，大家能夠多學一點就多學一點。我發現今天培心盛裝來做報告，那我們就開始，謝謝培心。

趙偉翔科長：謝謝署長。今天由企劃組羅培心專員為各位報告「格局變化—提供醫療照護之成本意識及價值」。

羅培心專員：署長、各位長官、各位醫界先進，大家早安，我是企劃組的培心，相信大家對上周雨育專委精彩的簡報還記憶猶新，本週承接上週的主題，有關「醫療照護價值定義探討」，這週要為各位導讀的主題是「醫療照護成本意識及價值的格局變化」，在正式開始之前，我想請大家看這有趣的東西。



大家可以看到這張漫畫，病人對醫師說：「醫師，我發現你開給我的藥好像沒辦法有效控制我的血壓耶」，醫師跟他說：「這不關我的事，這是因為你的醫療保險只有給付安慰劑而已。」這看起來好像是很離譜的對話，但其實實實在在反映了美國病患面對的醫療困境。

I didn’t want to see a doctor because I couldn’t pay for it.

I had to wait until my benefits kicked in so that I had insurance.

3

這邊文章的一開始是這樣的，一位醫師把他跟病人間的對話記錄下來，醫師問病人說為什麼你拖到現在才來就診，沒想到病人回他說，因為我必須等到醫療保險生效後才有錢看診。從這個案例可以發現，美國病患的就醫行為，其實跟醫療保險給付涵蓋範圍有關。

Patients often experience “sticker shock” at the time they obtain a bill

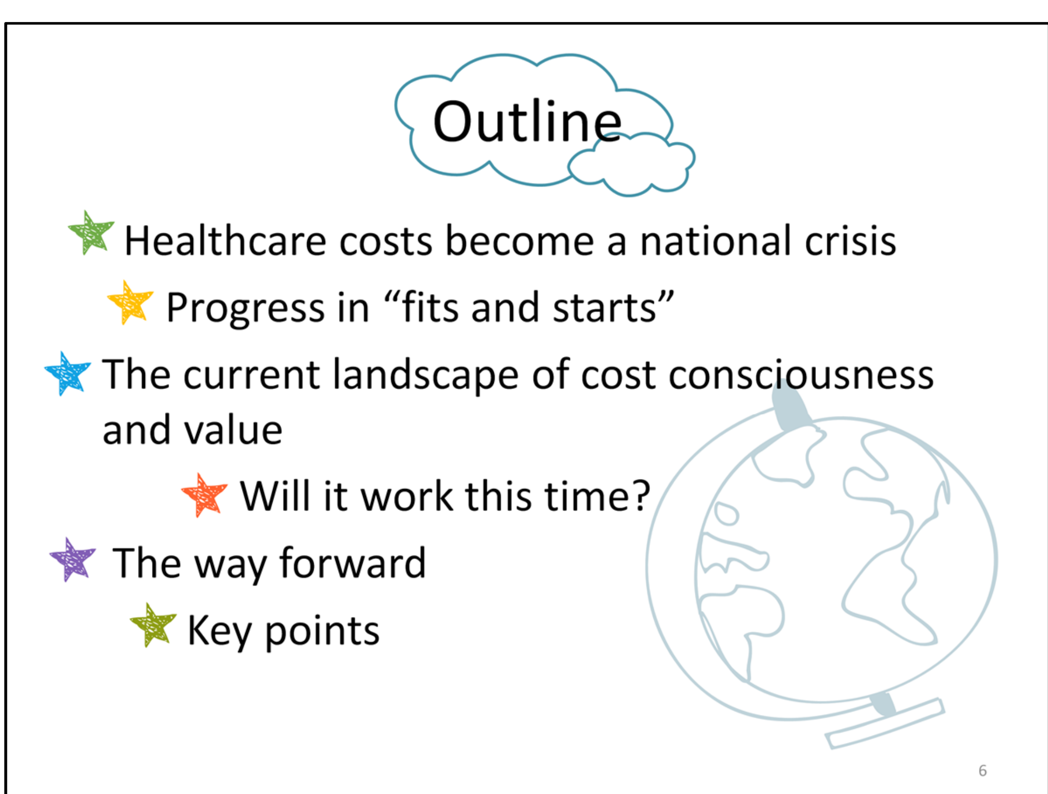
4

接著這些病人接受完醫療服務之後，總是會收到天價的醫療費用帳單。

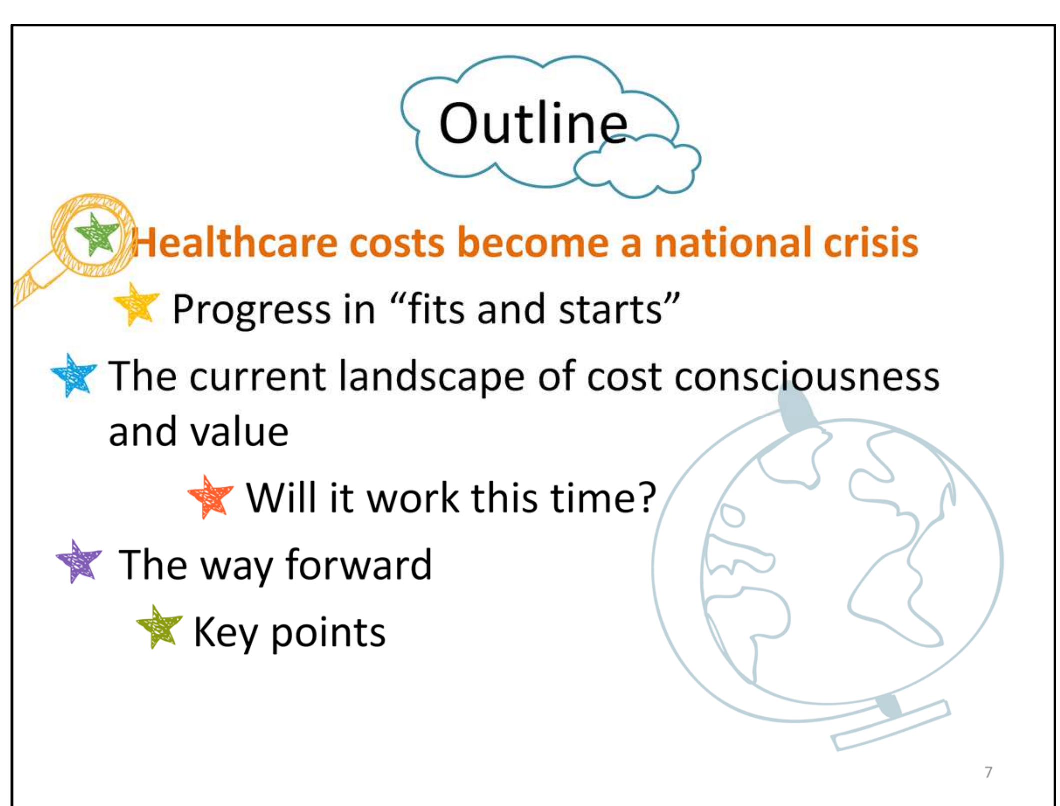
Unaffordable healthcare is like a cancer without adequate treatment.

5

其實醫療服務可負擔性很低，其實在很早以前這個問題就出現了，它就像是一個沒有經過適當治療的癌症，過了好幾十年也沒有改善，就算是今天山姆大叔因為醫療費用不斷上漲而去就醫，醫師還是會對他說：「今晚，我想來點MRI、電腦斷層掃描、心電圖、大腸鏡配抽血檢查。」



接下來我將依序為大家介紹這些主題。



首先看到的是醫療照護費用，已經變成美國國家級的危機。

Healthcare Costs become a National Crisis

Prior to the rise of medical insurance, all medical care was paid for by **out-of-pocket**.

8

其實大家都知道，在醫療保險大量出現之前，所有的醫療照護費用都是由病患自掏腰包、自費給付給醫療提供者。

Healthcare Costs become a National Crisis

Third-party insurance

Patients ⟷ Provider

- Costs became **less transparent** and more **difficult to cover**.
- **Medicare** has **not** fulfilled its promise.

9

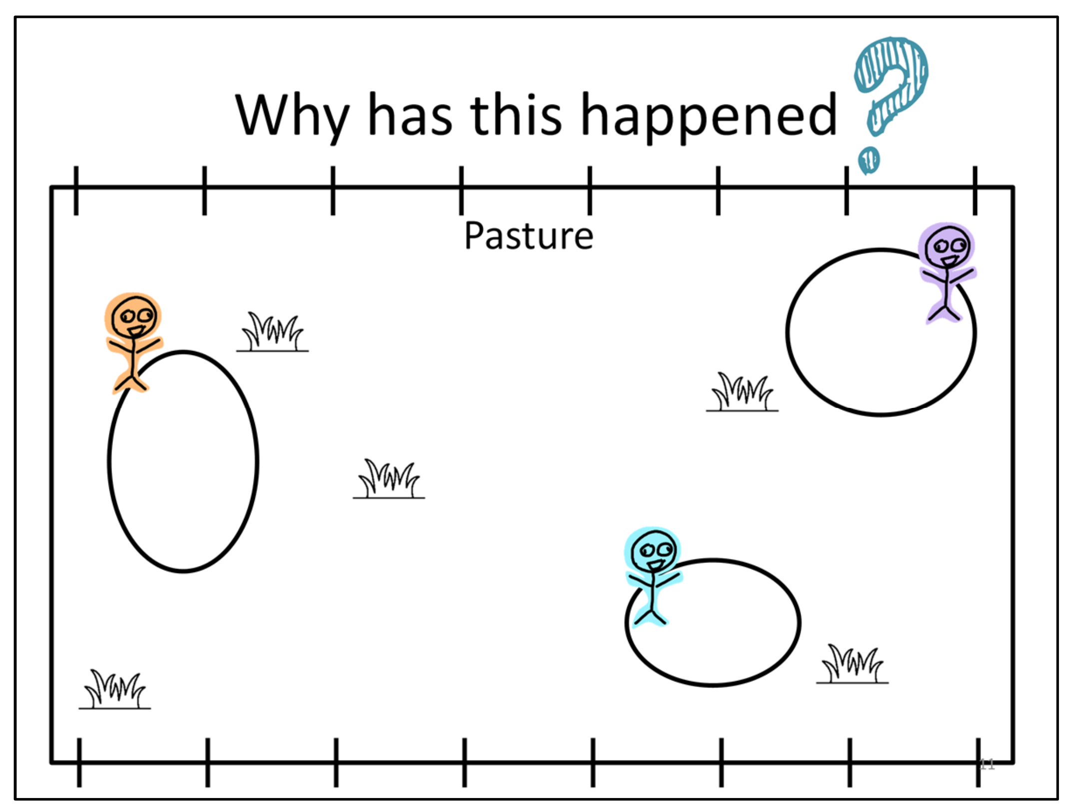
在第三方醫療保險主宰市場後，醫療費用變得更不透明、而且很難去釐清保險給付的涵蓋範圍，就算是Medicare，也沒有辦法有效的減輕醫療費用對老年人的財務衝擊。

Healthcare Costs become a National Crisis

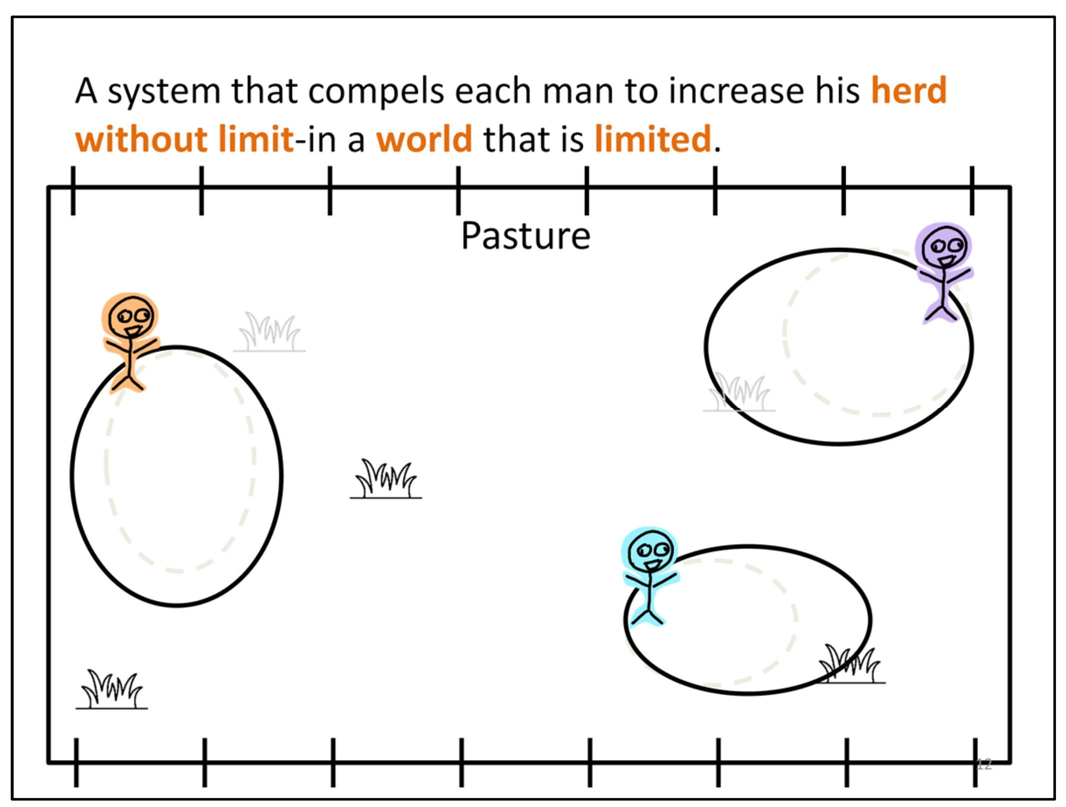
- Over the past 45 years, **healthcare spending** per capita has **increased** each year.
- Why has this happened?

10

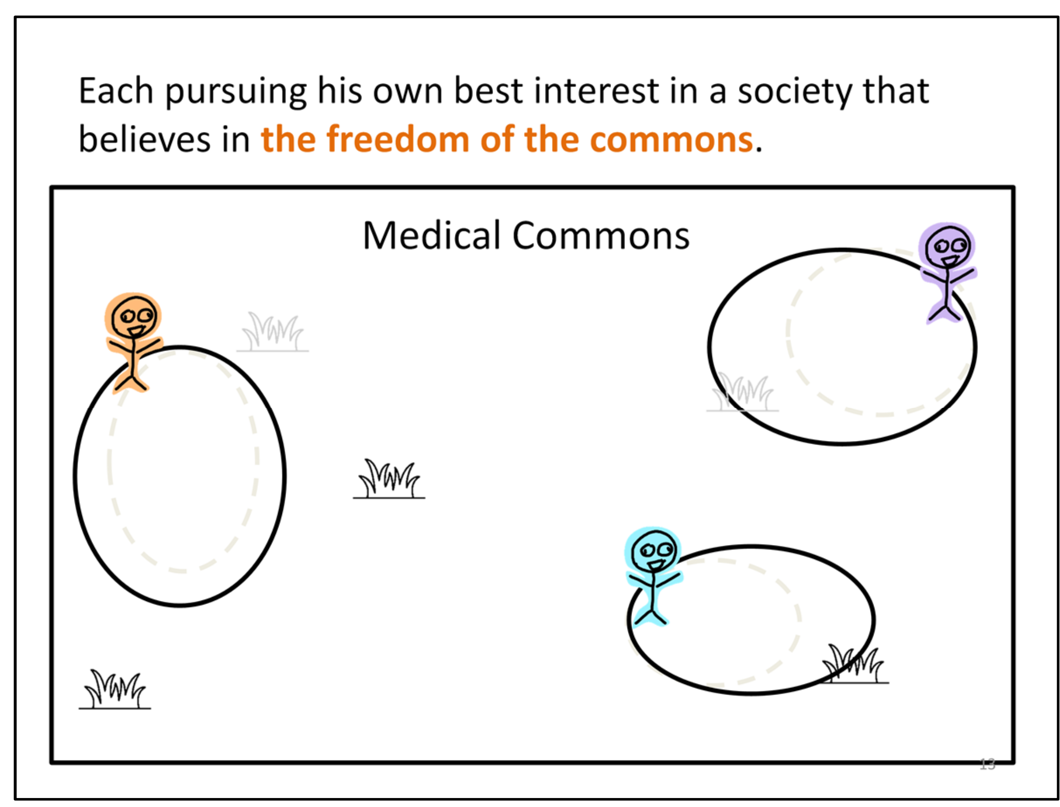
45年過去了，美國的人均醫療花費卻年年上升，究竟發生了什麼事呢?作者眉頭一皺，發現案情並不單純，他首先先為我們講了一個牧場跟許多牧牛人的故事。



大家應該可以看得出來，這個是我畫的柵欄，應該非常的美輪美奐，在柵欄裡是一座牧場，牧場裡有3個牧人，各自養著一群牛，接下來會發生什麼事呢?



每個牧人養的牛隻數量會越來越多，因為這樣才能達到個人最大利益，但這個牧場最後因為牧人的過度放牧，導致他牧場有限的資源耗竭。我想大家應該都很清楚，為什麼作者要講這個故事的用意了。



如果把這個美輪美奐的柵欄拿掉之後，牧場就好比是醫療資源，而牧人就好比美國醫師，因為在美國論量計酬支付制度下，美國醫師傾向提供過度的醫療服務，達到個人最好的利益，最後就會耗竭醫療資源，那為什麼會產生這樣的行為呢?那是因為他們對於公共財可以自由使用的觀念所導致。

所以，在1975年時，Dr. Howard Hiatt在NEJM發表了一篇文章，發起了保護醫療公共財的運動。

Dr. Howard Hiatt called on physicians, experts and the public to **protect** the " **medical commons**."

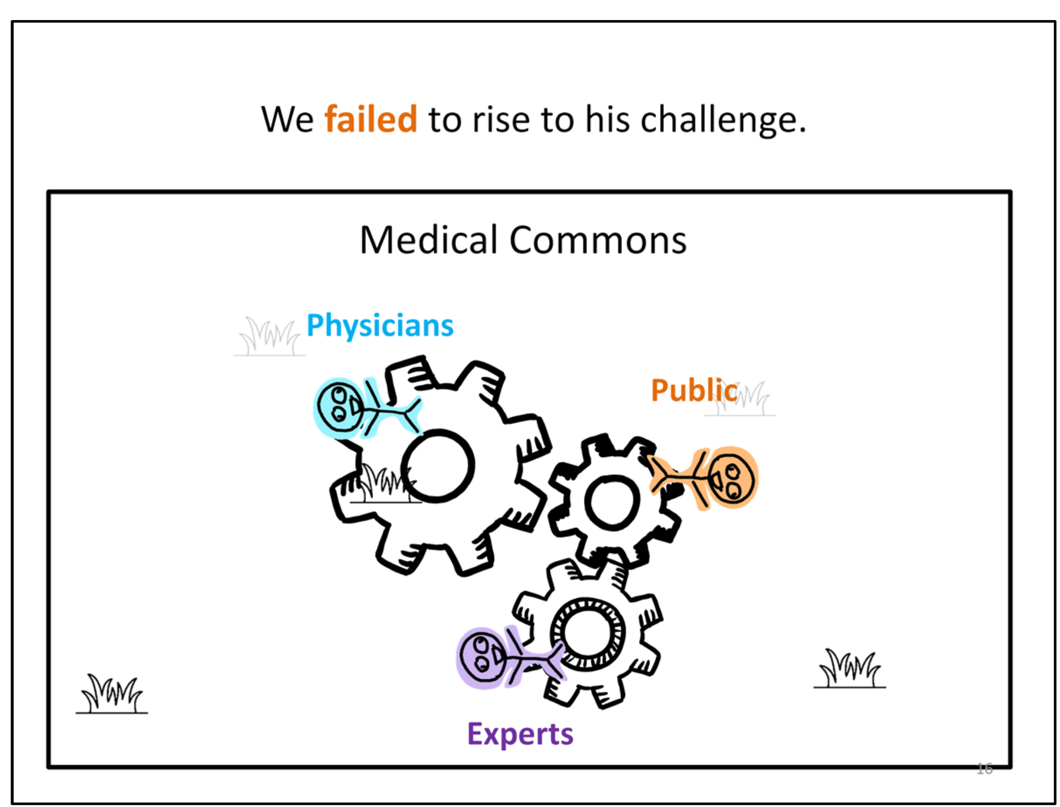
Medical Commons

Physicians

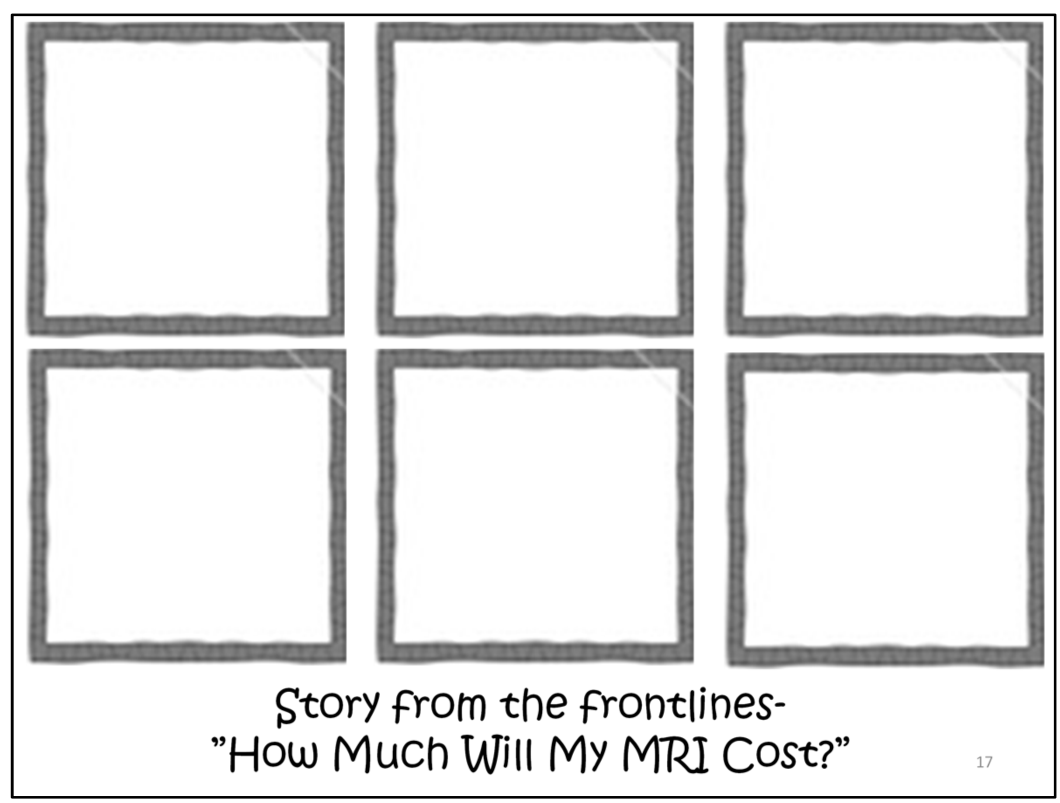
Public

Experts

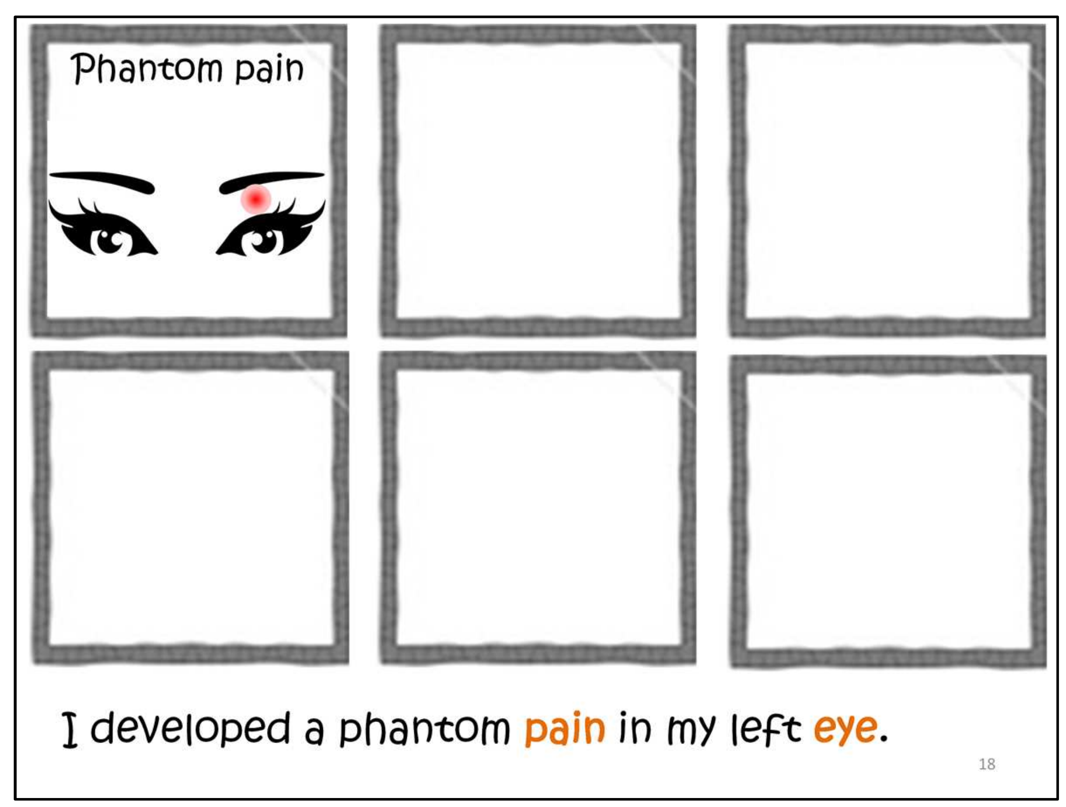
他號召這些醫師、專家還有大眾去保護醫療公共財，大家可以猜猜看這個行動是成功還是失敗。



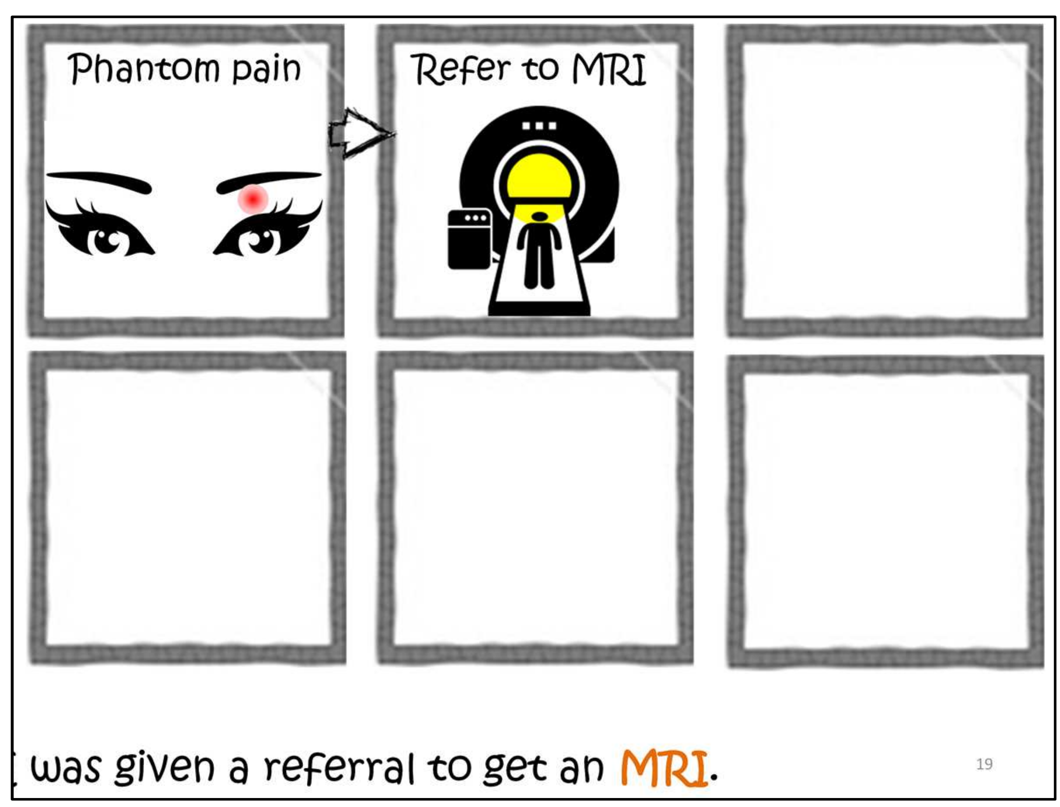
他最後還是失敗了，因為人們過度的消耗還有醫療浪費，逼得大家只能優先處理其他迫切社會需求或是國家優先的事項。



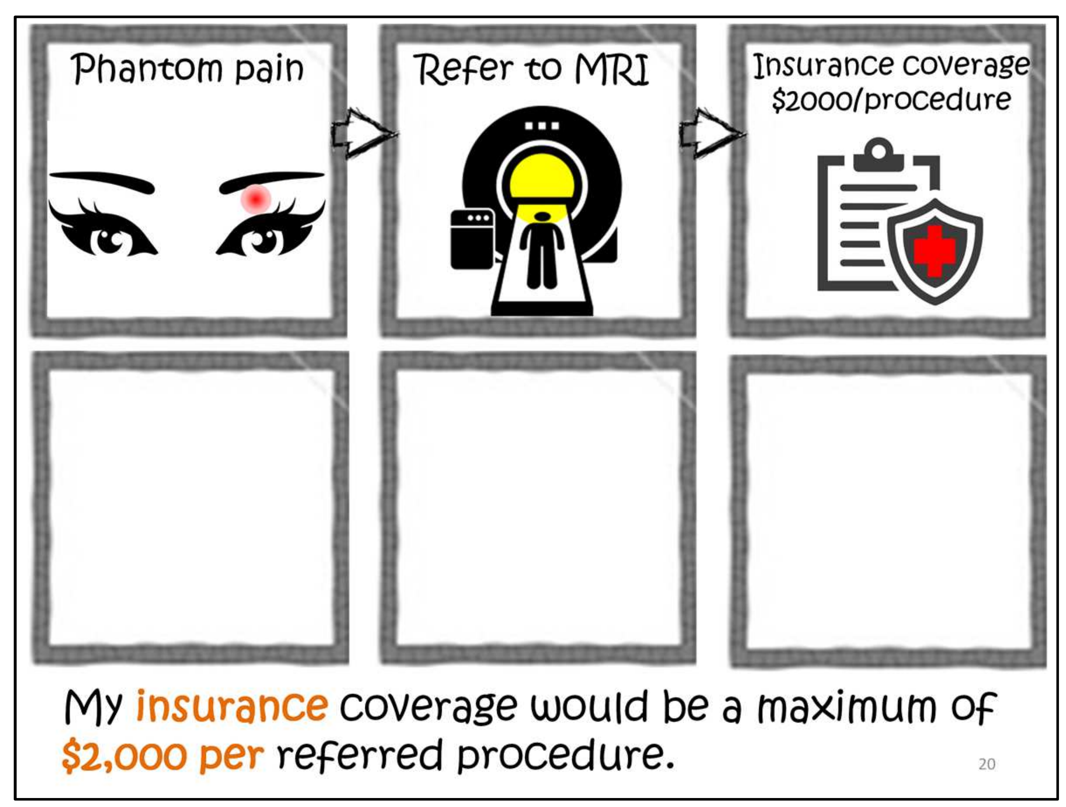
接著作者帶大家看一個以病人為觀點來出發的實際案例，這個我把它畫成一個漫畫，它的標題是“我要怎麼知道我的MRI檢查需要會花費多少錢呢?”



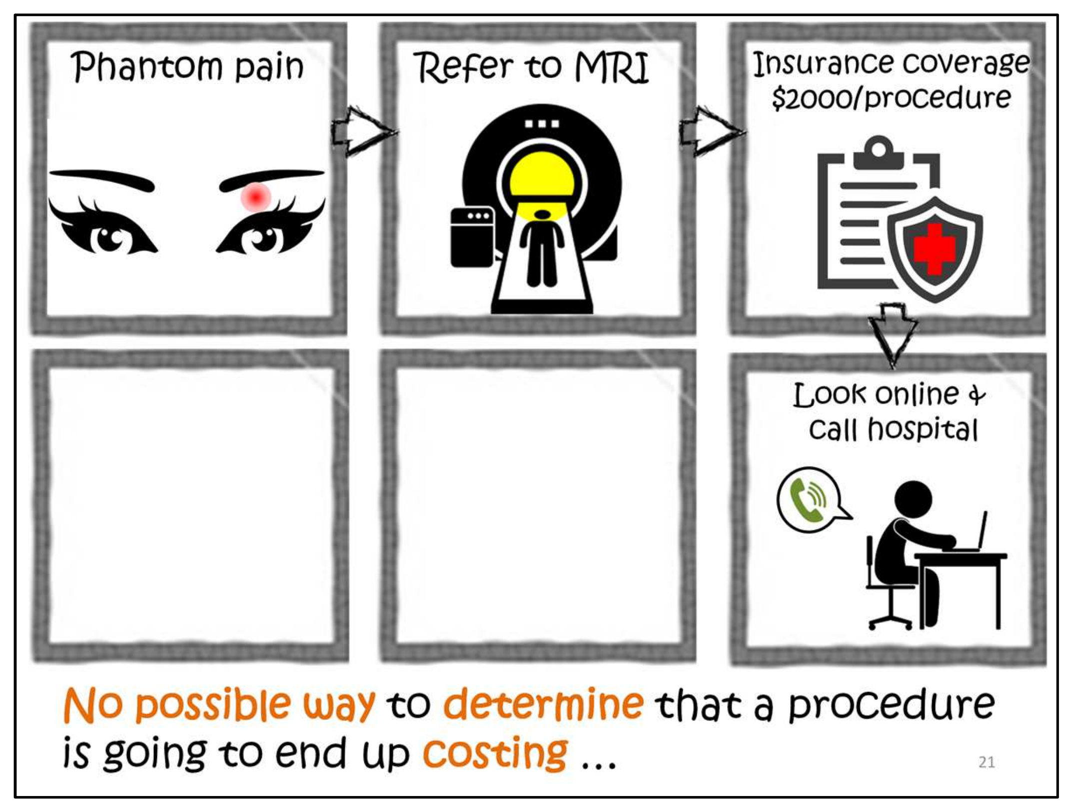
首先這位病人說，我發現我的左眼有幻痛的情形。



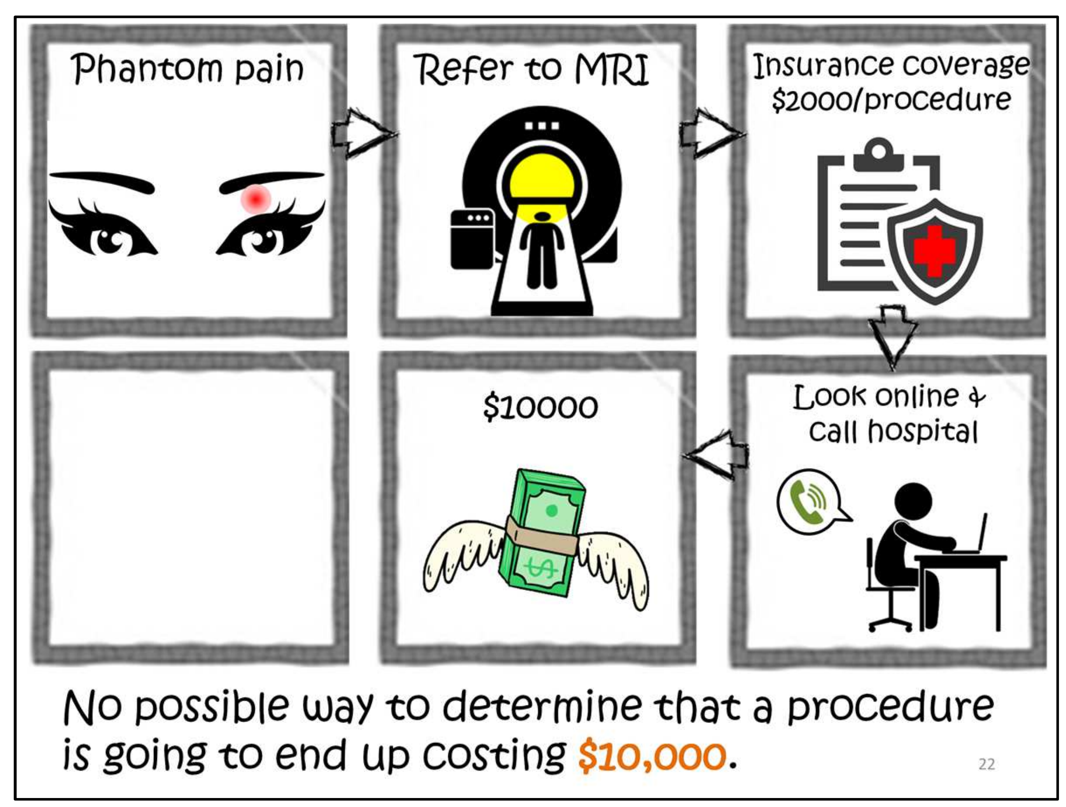
他去就診之後，被醫師轉介去做MRI檢查。



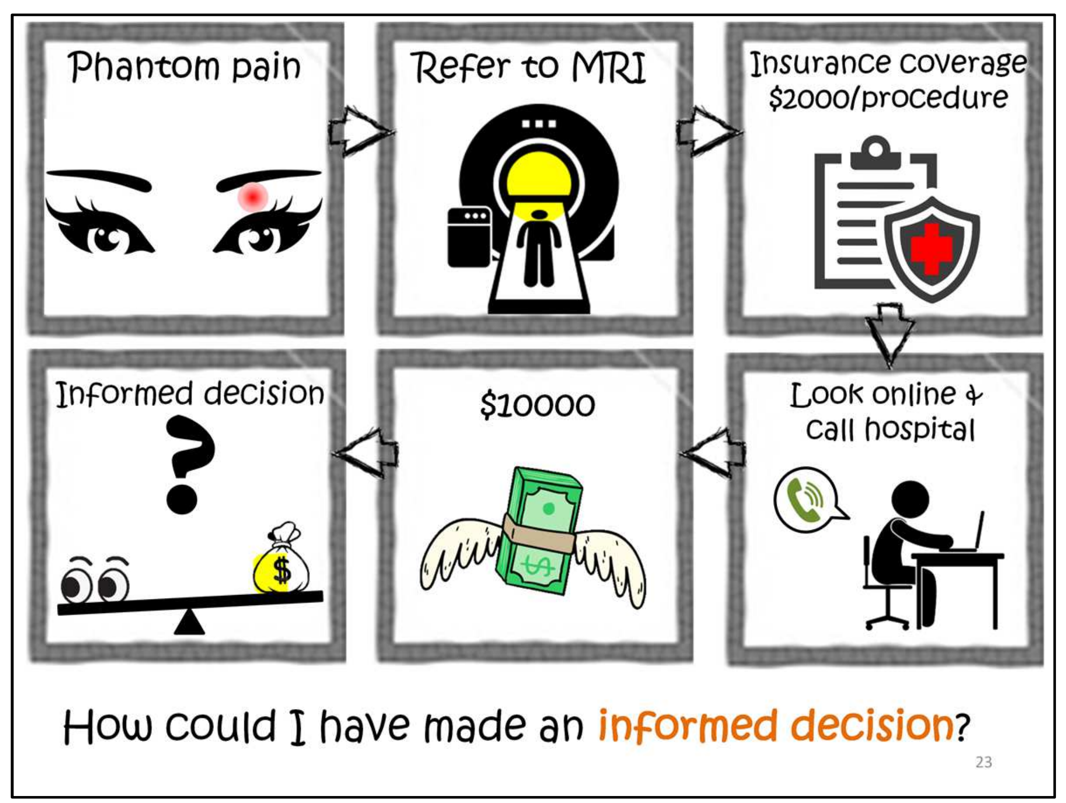
但是他的醫療保險每一項檢查最多只能給付2000美元。



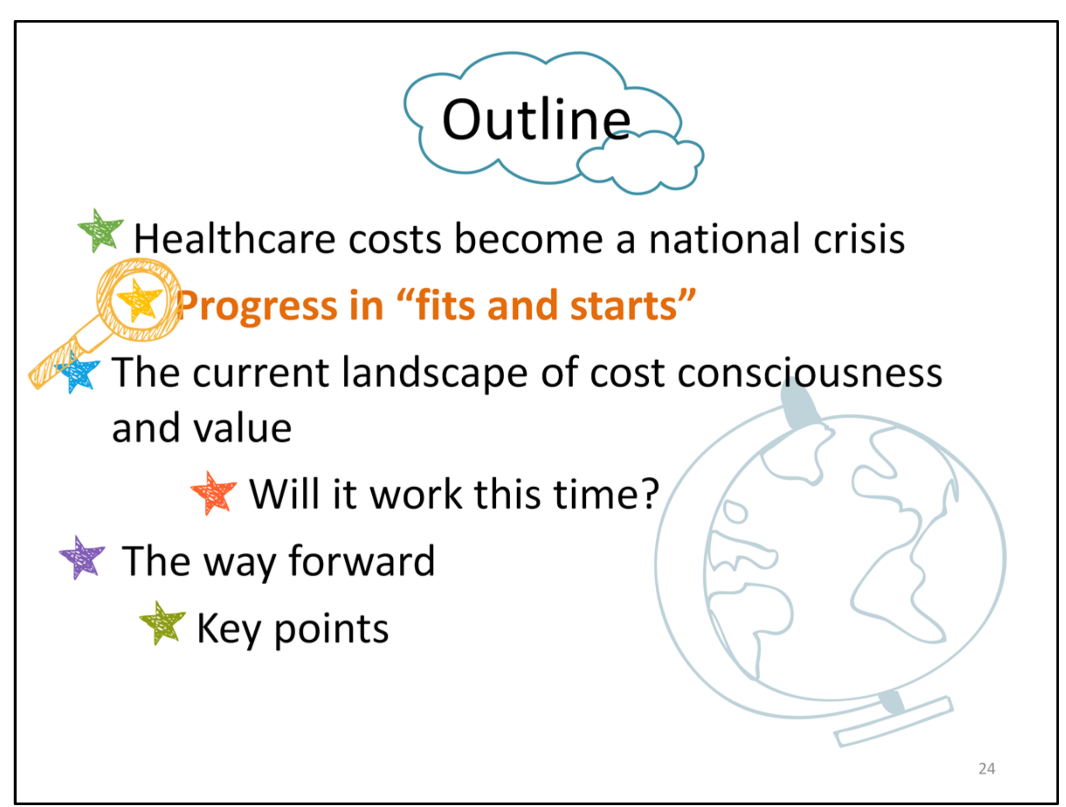
所以他用盡了各種方式，做MRI之前先去上網搜尋、聯絡醫療院所，想要得知他最後終究要花費多少錢。



結果他想都沒有想到，他一個MRI檢查居然要花費高達1萬美元。



在這樣的狀況下，病人如何在有充足的資訊下去做informed decision?



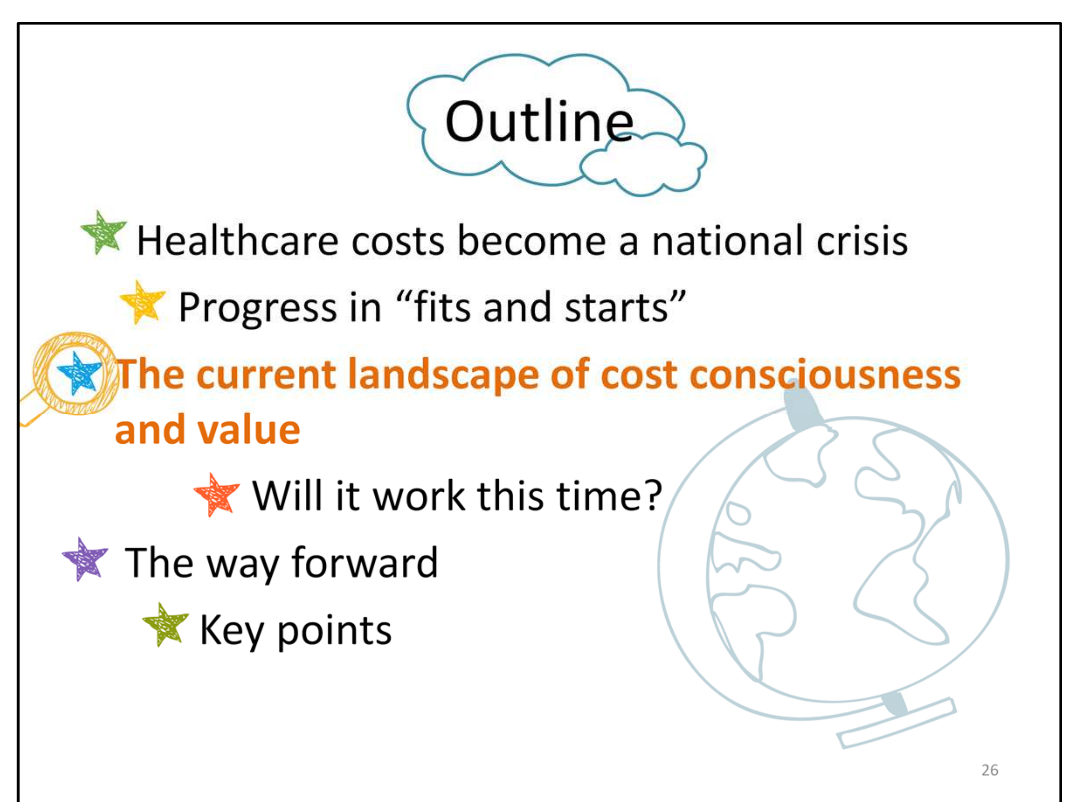
接下來就是介紹有關美國醫療改革史，正在斷斷續續的進步當中。

Progress in "fits and starts"

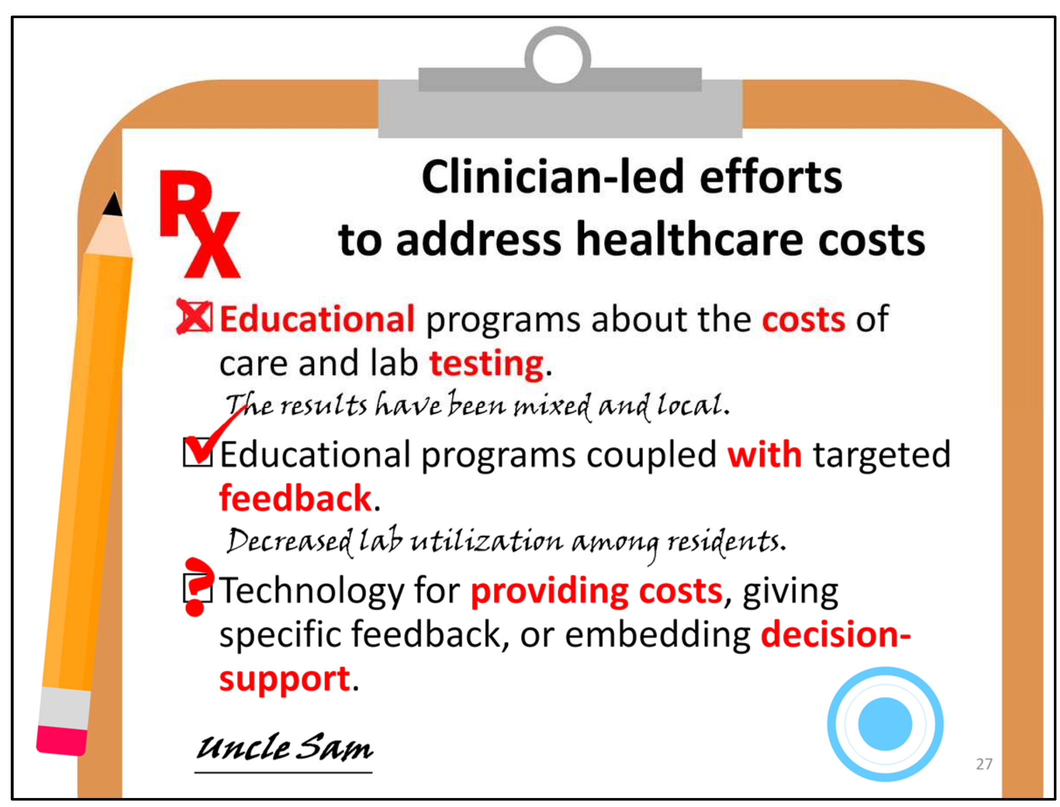
- From the early 1970s to 1990s, rounds of **treatments** with cost consciousness and containment have been administered, with severe **opposition** from the **medical** profession.
- **Affordable Care Act** was for the first time, major **physician** organizations were **supportive** of policy changes.

25

從1970年代的早期到1990年代，選出來的美國總統，都嘗試想要採取行政措施去解決跟改善成本意識的觀念，還有遏止醫療費用的上漲，但都遭到醫療專業團體強烈的反彈，直到歐巴馬提出了平價醫療法案，也就是ACA，美國的有關醫療成本意識及價值的改革才第一次獲得主流內科醫師團體的支持。



接下來我們來看看美國的醫療成本，跟價值的現況是怎麼樣呢?



第三種方法則想要利用現在的新科技，提供臨床醫師相關成本、個人化反饋、還有一些決策支援等相關資訊給臨床醫師讓他們參考使用，那因為時間還不長，所以效果待驗證。

Key influencers in the clinical professions arena

A notable recent development is the number of **influential professional organizations** that have put **efforts** to address stewardship, overutilization, and healthcare costs.

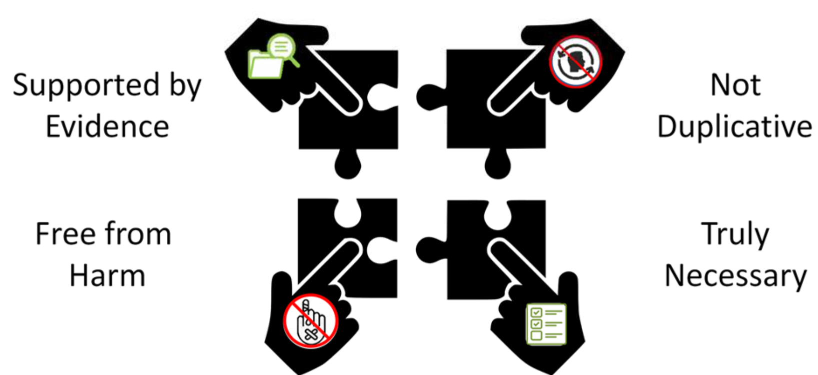
28

那值得注意的是，目前有很多像美國內科醫學會、美國醫師學會這些具有影響力的專業組織他們在監管、過度利用以及醫療費用付出的實質努力。

Choosing Wisely

- ABIM launched in 2011

To promote **conversations** between physicians and patients by helping patients **choose care**.



29

首先最廣為人知的是，美國內科醫學會在 2011 年發起了 “Choosing Wisely”運動，目的主要是促進醫師跟病患間的對話，藉此來幫助病患選擇一些具有醫療實證的、無害的、不重複的、還有真正必要的醫療服務。

Conversations

between physicians and patients

1 Physicians

Identify five procedures commonly used and questioned.

The potential savings from first three primary care could top $5 billion.

2 Patients

Translate some of these recommendations directly to patients.

30

那Choosing Wisely在醫師端的部份做的努力，他針對初級醫療照護像是家醫科、內科、兒科，去歸納出前五名最常被開立的醫療處置，而且這些醫療處置的必要性是受到質疑的，Choosing Wisely光是這麼做，就為美國的醫療費用潛在省下了50 億美元。同時Choosing Wisely也為民眾提供一些相關的建議跟解釋，這樣就可以促進醫師與病患間有效的溝通。

Table 5-1 Top five lists in primary care

Family Medicine	Internal Medicine	Pediatrics
1. Do not do imaging for low back pain within the first 6 weeks unless "red flags" are present.	1. Do not do imaging for low back pain within the first 6 weeks unless "red flags" are present.	1. Do not prescribe antibiotics for pharyngitis unless the patient tests positive for streptococcus.
2. Do not routinely prescribe antibiotics for acute mild to moderate sinusitis unless symptoms (which must include purulent nasal secretions AND maxillary pain or facial or dental tenderness to percussion) last for 7 or more days OR symptoms worsen after initial clinical improvement.	2. Do not obtain blood chemistry panels (eg, basic metabolic panel) or urinalysis for screening in asymptomatic, healthy adults.	2. Do not obtain diagnostic images for minor head injuries without loss of consciousness or other risk factors.
3. Do not order annual ECGs or any other cardiac screening for asymptomatic, low-risk patients.	3. Do not order annual ECGs or any other cardiac screening for asymptomatic, low-risk patients.	3. Do not refer otitis media with effusion (OME) early in the course of the problem.
4. Do not perform Pap tests on patients younger than 21 years or in women status post hysterectomy for benign disease.	4. Use only generic statins when initiating lipid-lowering drug therapy.	4. Advise patients not to use cough and cold medications.
5. Do not use DEXA screening for osteoporosis in women under age 65 years or men under 70 years with no risk factors.	5. Do not use DEXA screening for osteoporosis in women under age 65 years or men under 70 years with no risk factors.	5. Use inhaled corticosteroids to control asthma appropriately.

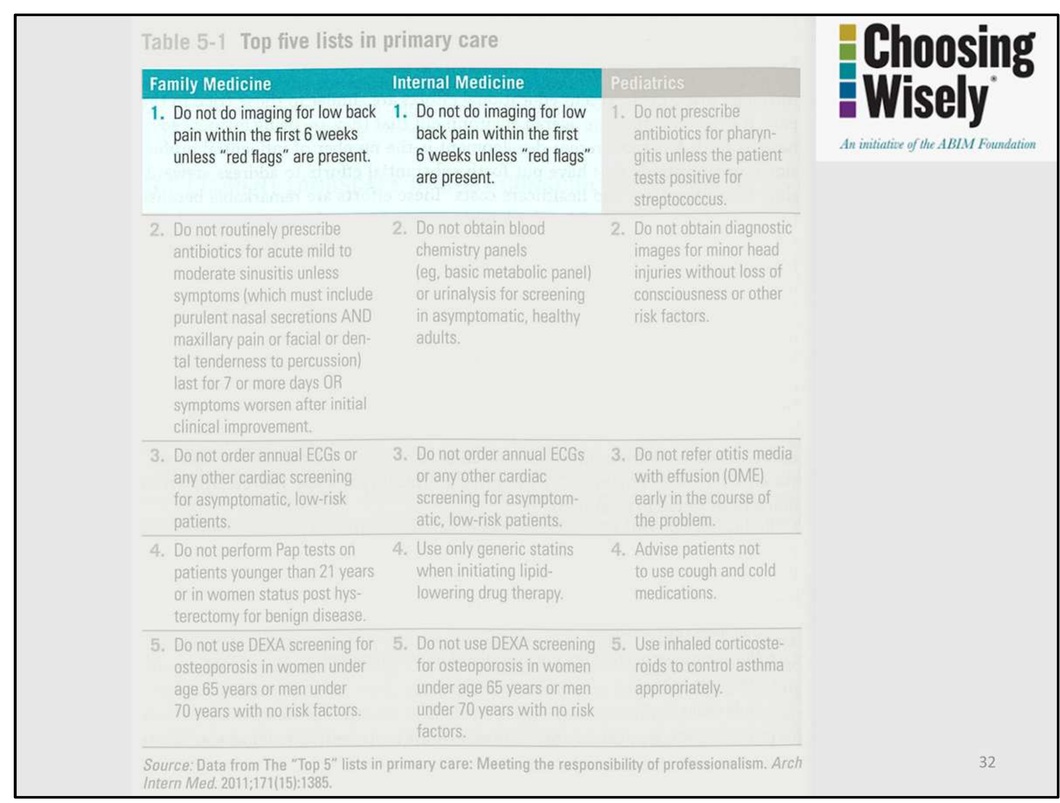
Source: Data from The "Top 5" lists in primary care: Meeting the responsibility of professionalism. *Arch Intern Med.* 2011;171(15):1385.

Choosing Wisely®

An initiative of the ABIM Foundation

31

這張表就是我剛剛提到的Choosing Wisely列出的三個初級醫療照護前五名的清單。



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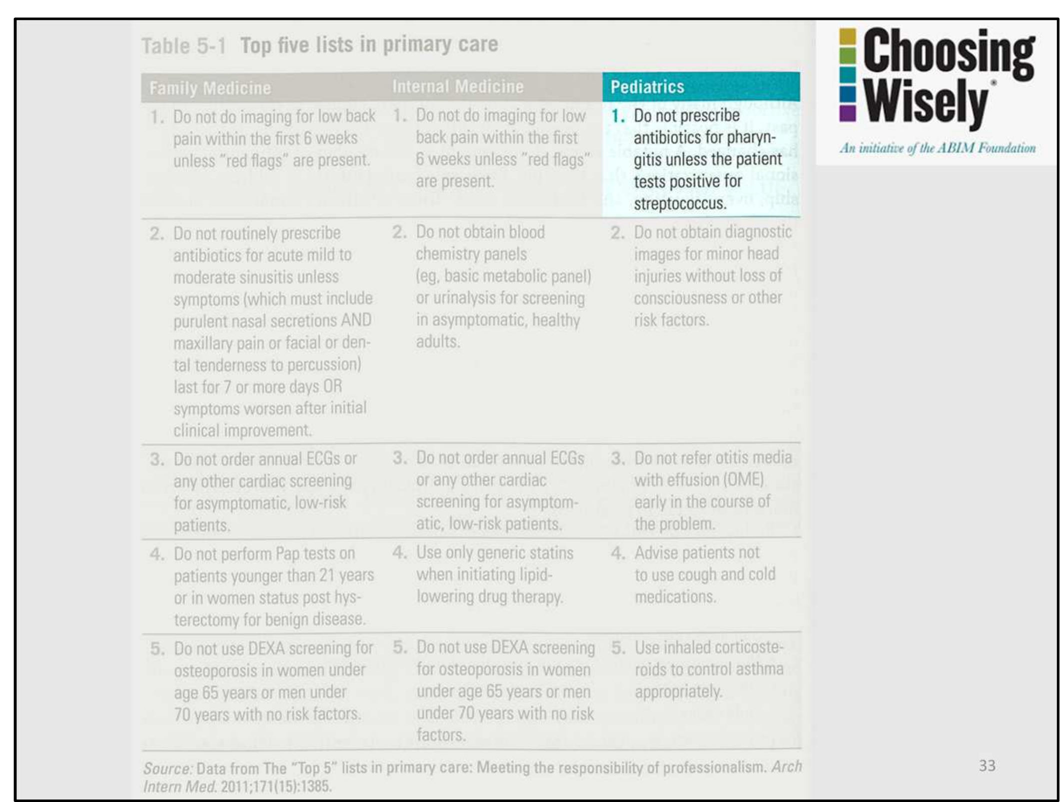
那我們可以看到，這張表的內科跟家醫科，可以發現他們的第1名都是他們很容易替那些下背痛卻沒有紅旗症狀的患者去開造影檢查。



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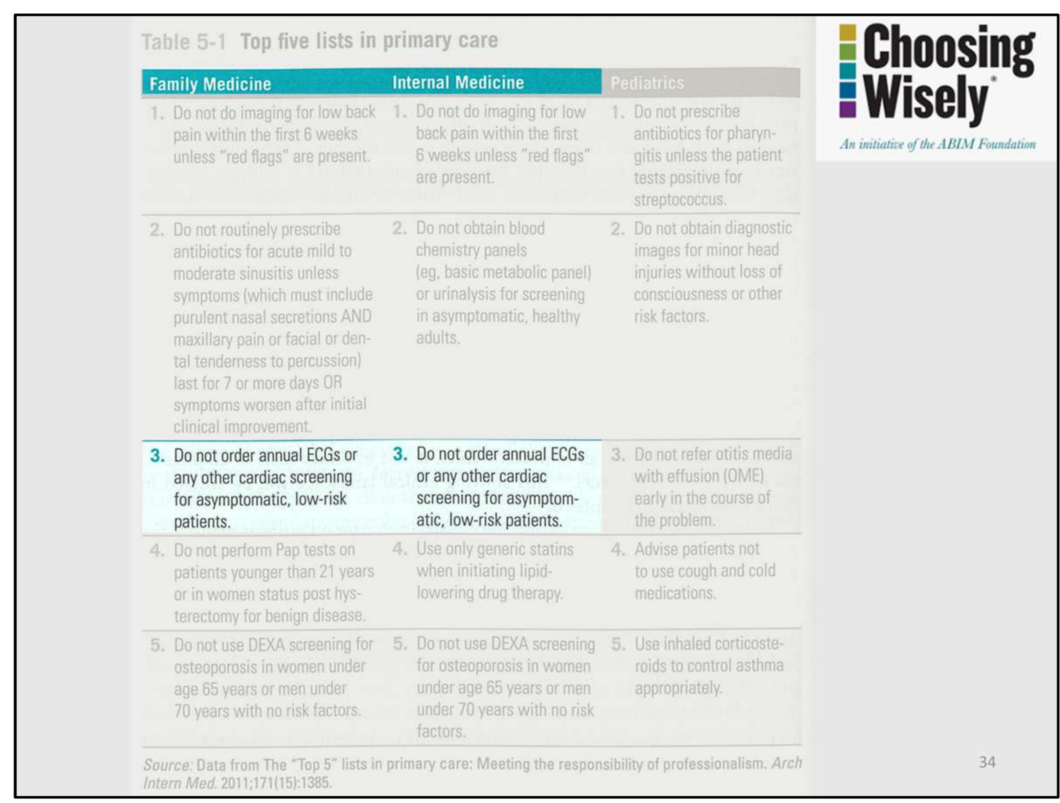
在兒科的部份，Choosing Wisely發現醫師常常替那些給沒有鏈球菌陽性反應的咽頭炎病患開立抗生素。



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從這張表可以看到，家醫科跟內科的第3名都是醫生每年固定替無症狀、低風險患者開立心電圖還有心臟相關的檢查。

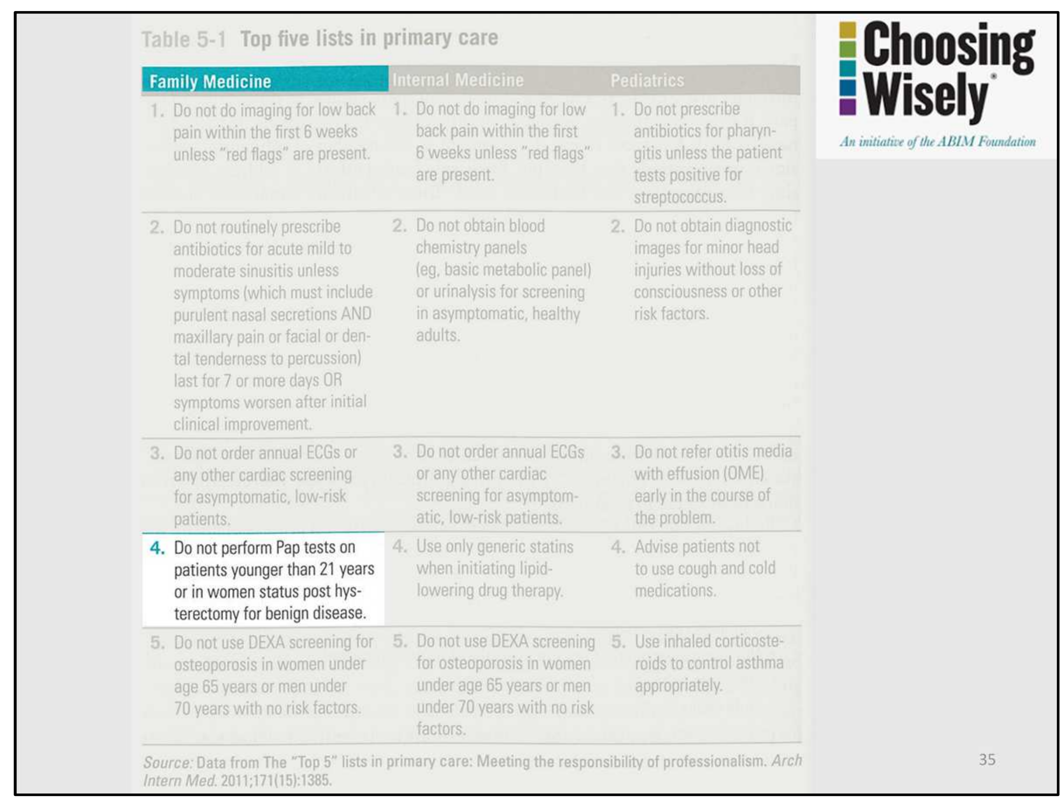
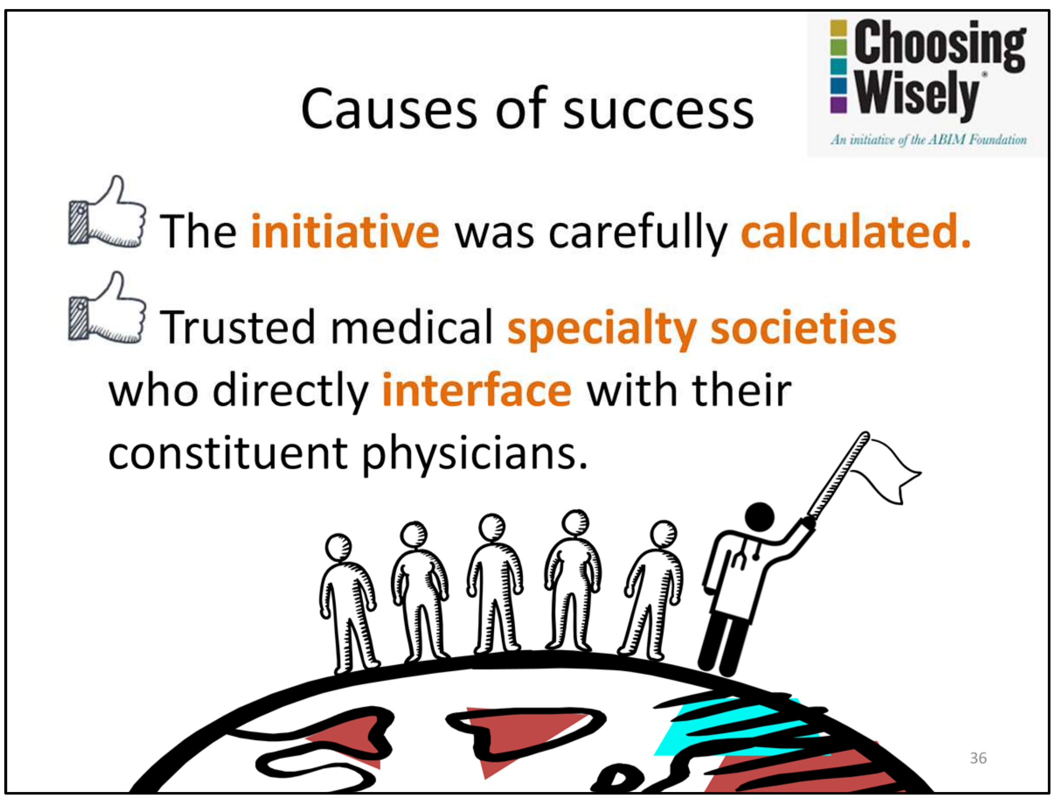


Table 5-1 Top five lists in primary care

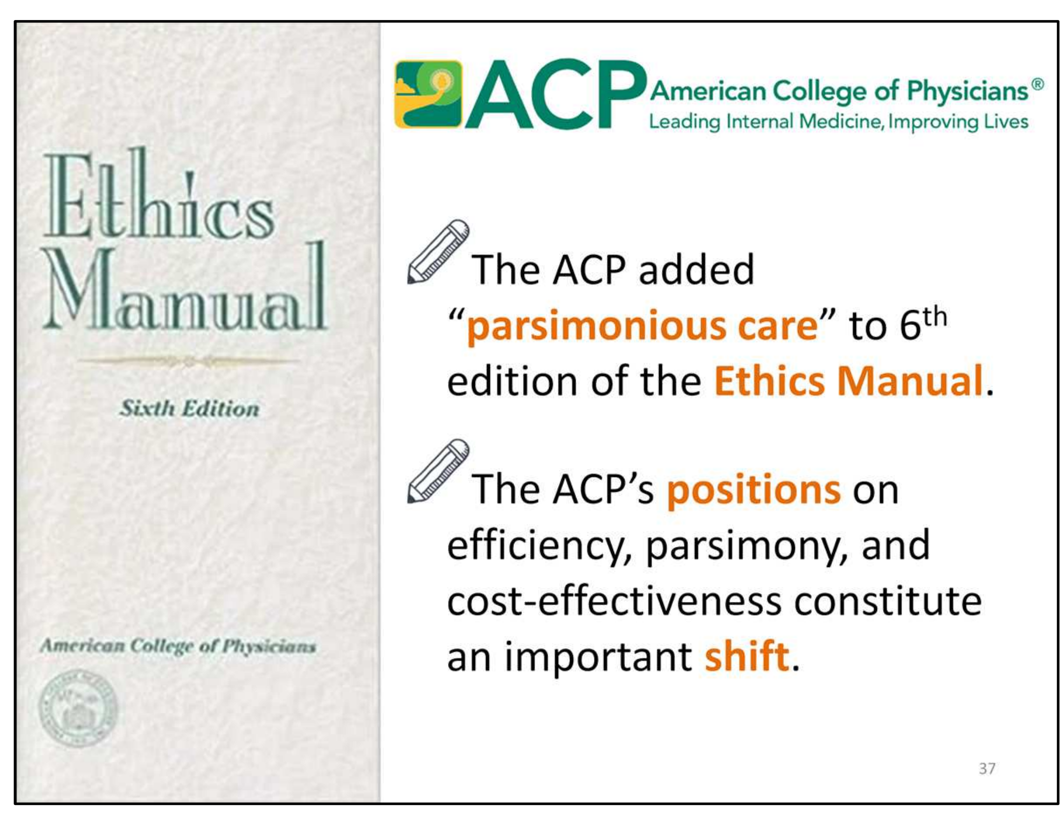
Family Medicine	Internal Medicine	Pediatrics
1. Do not do imaging for low back pain within the first 6 weeks unless "red flags" are present.	1. Do not do imaging for low back pain within the first 6 weeks unless "red flags" are present.	1. Do not prescribe antibiotics for pharyngitis unless the patient tests positive for streptococcus.
2. Do not routinely prescribe antibiotics for acute mild to moderate sinusitis unless symptoms (which must include purulent nasal secretions AND maxillary pain or facial or dental tenderness to percussion) last for 7 or more days OR symptoms worsen after initial clinical improvement.	2. Do not obtain blood chemistry panels (eg, basic metabolic panel) or urinalysis for screening in asymptomatic, healthy adults.	2. Do not obtain diagnostic images for minor head injuries without loss of consciousness or other risk factors.
3. Do not order annual ECGs or any other cardiac screening for asymptomatic, low-risk patients.	3. Do not order annual ECGs or any other cardiac screening for asymptomatic, low-risk patients.	3. Do not refer otitis media with effusion (OME) early in the course of the problem.
4. Do not perform Pap tests on patients younger than 21 years or in women status post hysterectomy for benign disease.	4. Use only generic statins when initiating lipid-lowering drug therapy.	4. Advise patients not to use cough and cold medications.
5. Do not use DEXA screening for osteoporosis in women under age 65 years or men under 70 years with no risk factors.	5. Do not use DEXA screening for osteoporosis in women under age 65 years or men under 70 years with no risk factors.	5. Use inhaled corticosteroids to control asthma appropriately.

Source: Data from The "Top 5" lists in primary care: Meeting the responsibility of professionalism. *Arch Intern Med.* 2011;171(15):1385.

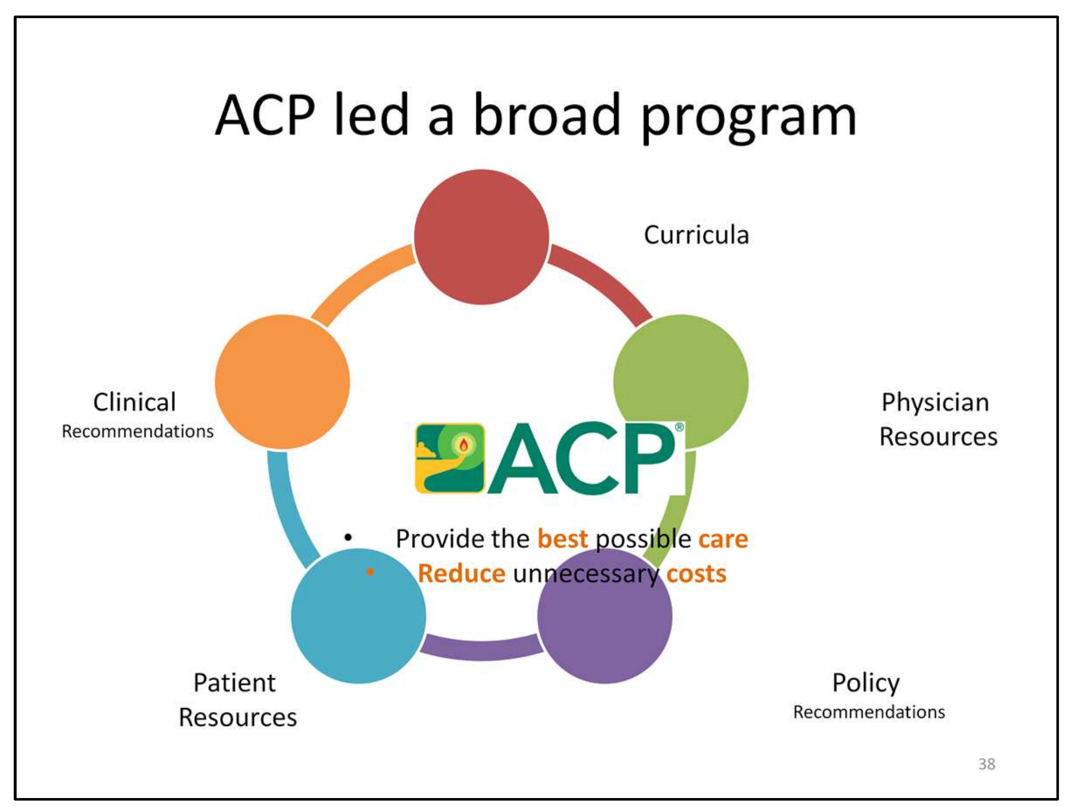
其中我覺得有一個比較離譜的是家醫科的第4名，就是醫師替那些已經進行子宮切除手術的婦女開立子宮抹片檢查。



Choosing Wisely的成功可歸功於以下2點：
1.當初的倡議有效的避開了民眾對政府醫療改革不力的質疑，最終才能夠串連所有利害關係人開啟有效的對話
2.值得信賴的醫療專業團體帶領其所屬醫師成員，與病患共同解決不適醫療、浪費等議題



接著是美國醫師學會所做的努力，他們第6版的倫理手冊當中，加入重要的概念，這概念就是「將精簡醫療視為醫師道德責任」的的一部份，美國醫師學會在效率、精簡醫療及成本效益上面的立場構成一個重要的轉捩點。



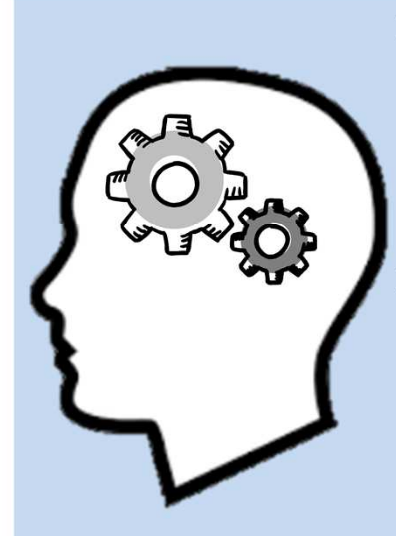
這個是美國醫師學會所主導的一項廣泛計畫，我們可以看到他有針對臨床部份發展臨床指引，開設一些課程，提供給醫師一些搜尋的資源，還有提具政策建言以及開發資源，讓病患可以查詢相關資料，都是為了要在減少不必要的醫療成本狀況下，提供最好的醫療照護。

Institute of Medicine

- Created a “**Value Incentives Learning Collaborative**” in 2010.
- Released a report entitled “**Best Care at Lower Cost**” in 2012.

另外美國醫學研究院在2010年建立了一個 “以價值導向的學習合作組織” ，並在2012年發表了一篇名為”在較低成本下給予最好的醫療照護”的報告。

“Best Care at Lower Cost”



- Provided an argument for the need to **transform** healthcare to provide “**continuously learning**” systems
- Outlined emerging **tools & strategies** to accomplish this goal.

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而這篇報告驗證了一件事情的必要性，這件事情就是醫療照護體系他必須要轉變成一個可以持續學習系統的體系，此外他還進一步的去說明可以達成“Best Care at Lower Cost”這個目標的新興工具和策略。

Costs of Care Inc.

- Held an annual essay contest since 2009, crowdsourcing anecdotes that illustrate **opportunities** to **improve** the **value** of care.
- The **"Teaching Value" Project** teaches clinicians why, when, and how to "choose wisely."

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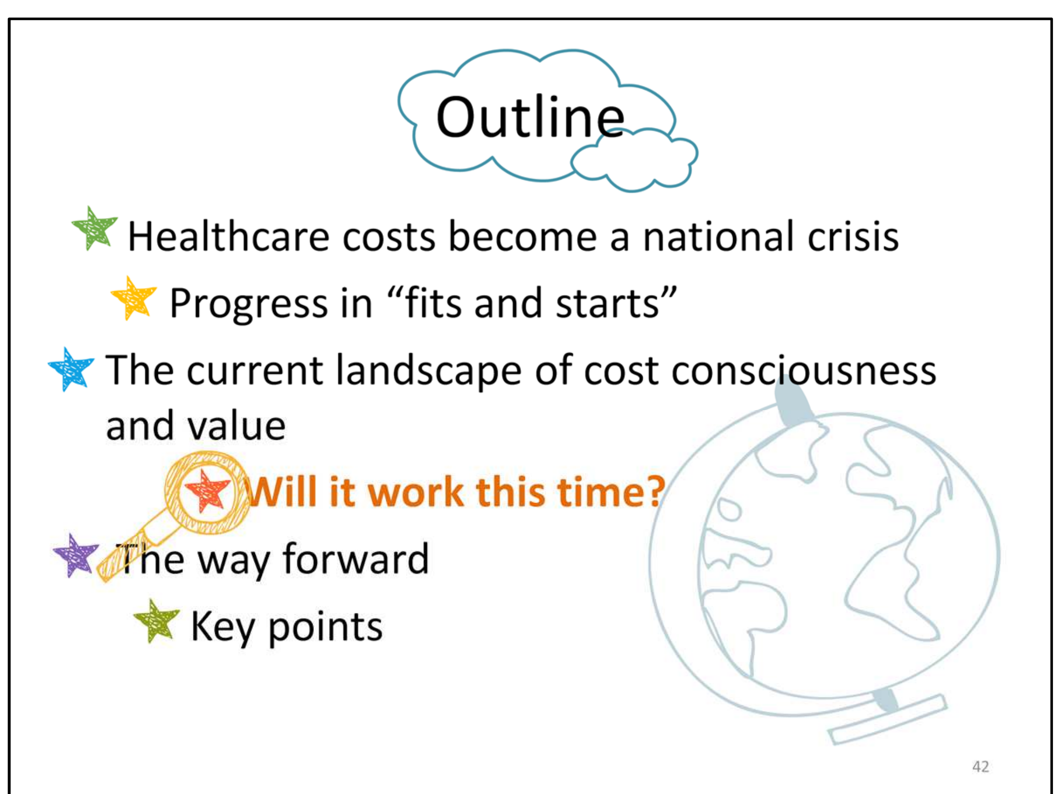
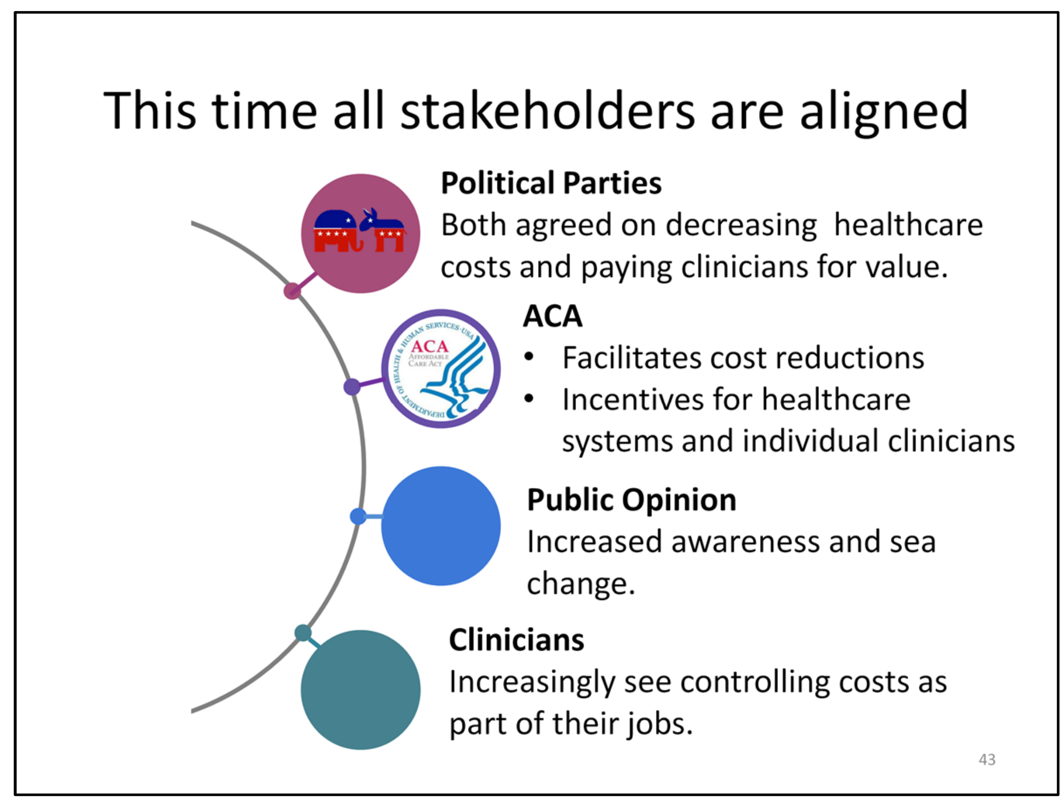
另外，Costs of Care公司自2009年開始，每年都會舉辦散文比賽，連結這些民眾，一起分享他們遭遇到的醫療價值獲得提升的趣聞，而這些故事也帶來重要的洞見，同時也揭露出既有體系現在的弊病。他們也和美國內科醫學會合作，執行"價值教育"計畫，用來告知臨床醫師為何、何時以及如何聰明的做選擇。



那這次他們的行動會成功嗎?



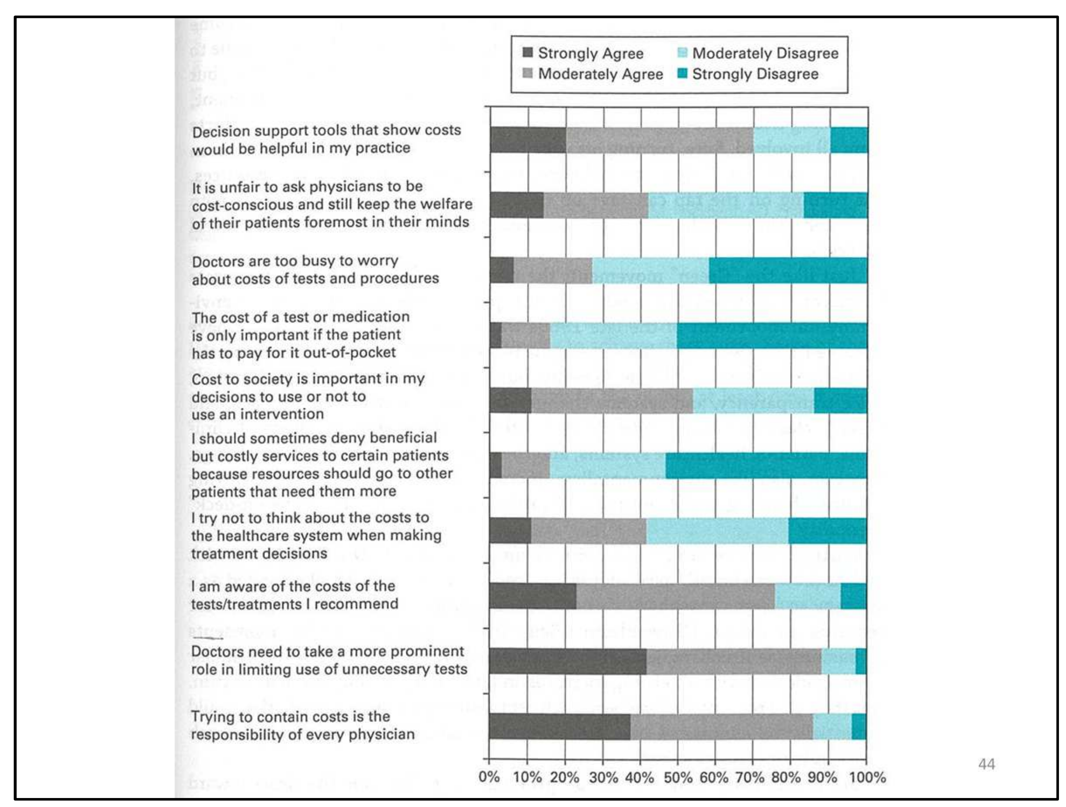
我想，答案是肯定的。因為這次，所有的利害關係人已經聯合起來處理醫療費用的問題

1.在政黨方面，不管是民主黨還是共和黨都認為應該降低醫療費用，並發展以價值為導向的醫療支付制度

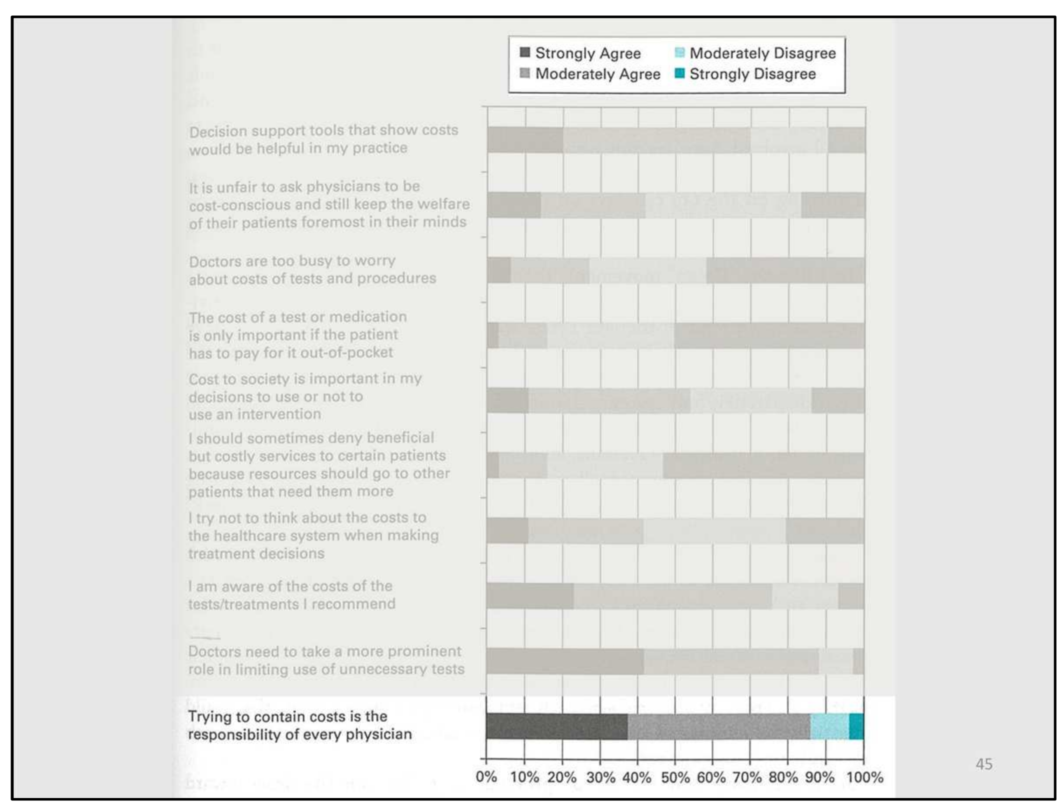
2.而剛剛提到的平價醫療法案(ACA)，除了有效促進醫療費用的下降，並給予醫療體系和個別臨床醫師提升醫療服務價值的誘因

3.可以觀察到美國民眾在「醫療費用及不必要的醫療服務」已經開始意識覺醒及民意產生相當大的變化

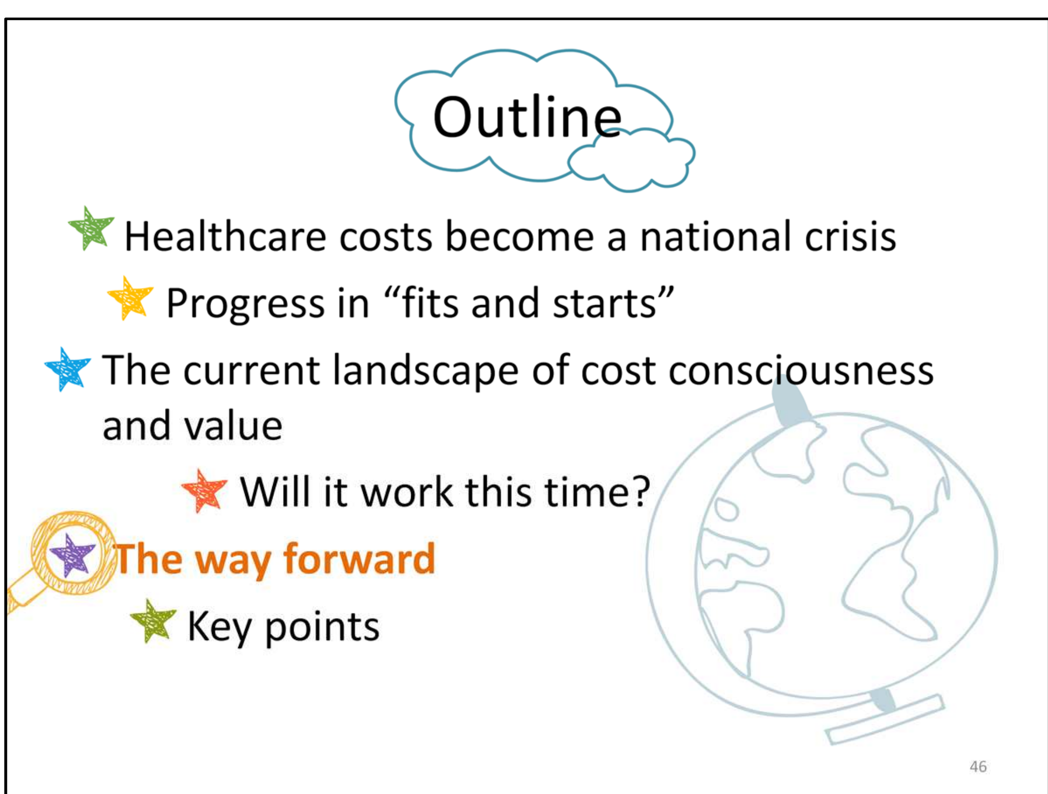
4.在臨床面部份，越來越多醫師將控制醫療費用視為是他們工作職責的一部份



這是一個調查結果，這個調查是有關抑制醫療服務的部份，調查對象是內科醫師，內科醫師可以針對不同的描述去表達他們同意或不同意的程度。

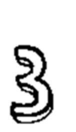


這張表的最後一列可以看到，其實已經有超過八成以上的內科醫師認為抑制醫療費用的成長應該是每位醫師的責任。



那接下來未來會怎麼發展呢?

Addressing healthcare costs like the environmentalism movement



- Shift culture
- Change social norms
- “All-hands-on-deck” mentality

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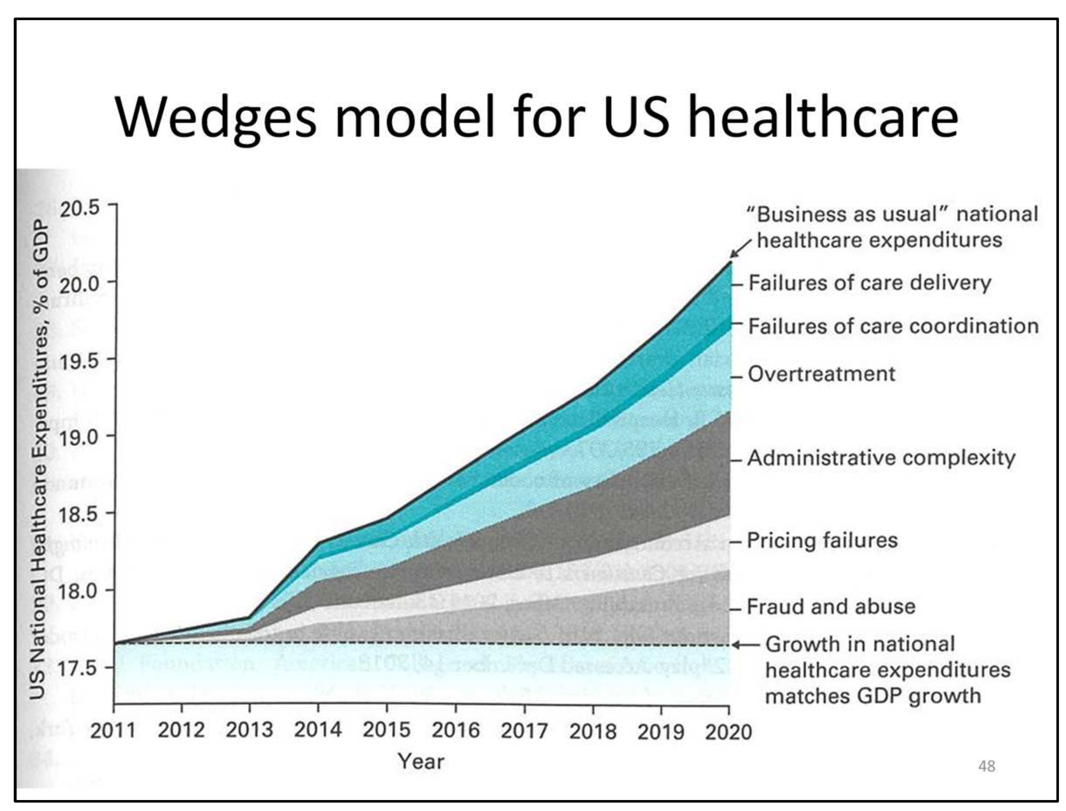
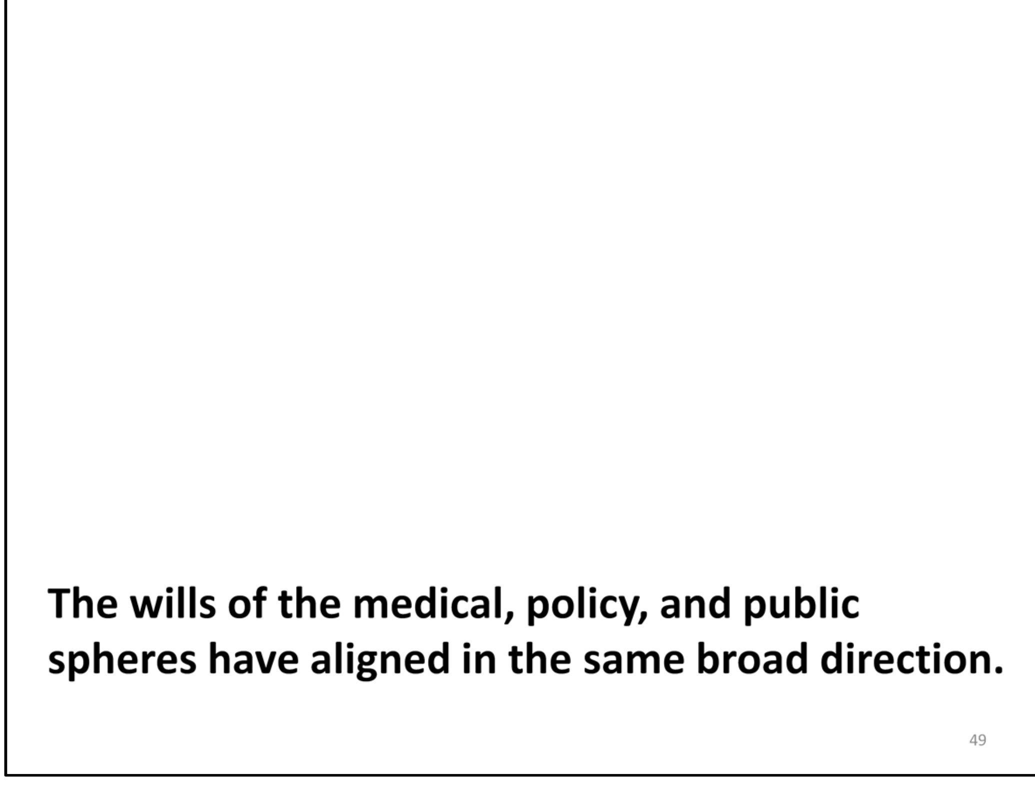
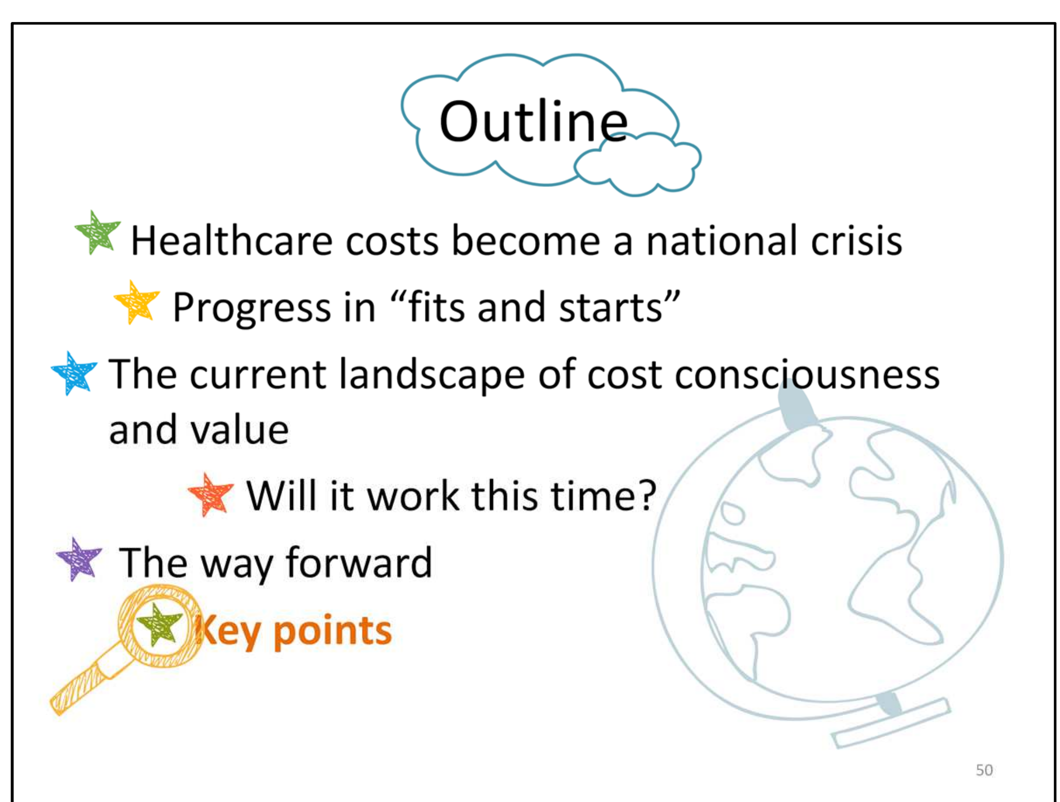
其實公共財被剝削不只存在醫療體系，還存在在環保上，有相同的情形，所以處理醫療費用問題其實就和環保行動非常相似，比如說：
1.需要所有的參與者都付出一點努力才能看見成效
2.這兩項行動都是由年輕人所號召，像最近的醫療價值的行動就是由年輕的實習醫師領軍的
3.我們必須有個目標，朝著文化及社會規範的轉變及以”全員出一份力”的心態去努力，就能得到巨大的收穫
4.這兩個行動都是採取楔形模型解決問題



大家可以看到最上面的粗黑線，它表示就現況去推估未來醫療費用占GDP的比例，這本書是2015年出版，所以我們可以看到推估之後的費用，醫療費用成長幅度遠遠高於GDP的成長率，那下面這些不同顏色的區塊是什麼意思呢?這些區塊分別是代表隨著時間可能可以被消除的醫療浪費的原因，那要怎麼利用現行模型來解決問題?就是可以同時去併用不同區塊的策略，這麼做的話可以比較有效的去縮減醫療費用跟GDP間的缺口。



現在美國的醫療界、政策還有公共領域，都朝相同的方向努力跟合作，雖然說到達月亮的方法不是每個人都認同，但是至少他們現在大家都看著天空，並且知道他們的目標在哪裡。



最後是重點提示。

Key points

Rising Healthcare Costs
- Identified as a **problem** for many decades
- **Continue** to **rise** unabated

Medical Professional Organizations
- **Lack** of **engagement** helped doom prior efforts
- **Endorsed** the **ACA**

Independent Efforts of Medical Societies
- Choosing Wisely
- High-Value Care
- Teaching Value Project

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第一個部份就是，回顧剛剛我們提到的，雖然醫療費用這個問題很早就發生了，但過了好幾十年還是沒有改善，而且持續上升當中，之前的醫療改革行動之所以會失敗，就是因為缺乏醫療專業團體的支持還有參與，但是自2010年起，主流的內科醫師組織開始為平價醫療法案進行背書，並協助法案的通過。那最後值得注意的是，這些專業的醫療團體，他們各自付出了實質的努力去降低醫療費用以及提升醫療照護的價值。

Align all stakeholders to address the overuse problems.

Control quantity by price to raise people's cost awareness.

Develop **decision-support** module by **AI**.

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最後是我的心得跟建議部份，我想從這篇文章可以看到要解決醫療浪費的問題，必須要所有人一起努力，包括政府、民眾跟醫界。從這張圖可以看到其實台灣非常幸運，因為我們的醫療、因為健保的關係是”便宜又大碗“，但是這可能會造成另外一種的醫療浪費，病人可能會產生一些道德風險的情形，未來希望可以在不影響弱勢族群就醫的狀況下，以價制量的方式來提升成本意識。最後我認為可以參考美國的經驗，比如說一些教育訓練，或是我們台灣是IT大國，我們可以利用一些AI的技術來發展一些決策支援的工具跟模型，來幫助我們的醫師、輔助他們做決策，減少醫療浪費。

- Title : Understanding Value-Based Healthcare
- Authors : Christopher Moriates, Vineet Arora, Neel Shah
- Publication Year：2015

這個是我的參考書目

最後我想以這張電影海報作結，不知道大家有沒有人看過這部電影，這個電影其實跟我今天要講的主題非常相關，它是在描述一個在美國沒有醫療保險的病人，他的手指不小心被截斷了，然後他很煩惱說：「我要花1萬美元救我的無名指，還是花6萬美元救我的中指？」這樣荒謬的開場漸漸帶出美國醫療保險過度資本化所造成的種種弊端跟弊病。其實我覺得它的中文翻譯非常有趣，叫做「健保真要命」，那因為關心健保，人人有責，非常推薦大家去看這部電影。

謝謝大家。