Overdiagnosis and Overtreatment

報告者: 洪淑真護理師
單位: 兒童加護病房
日期: **20190116**
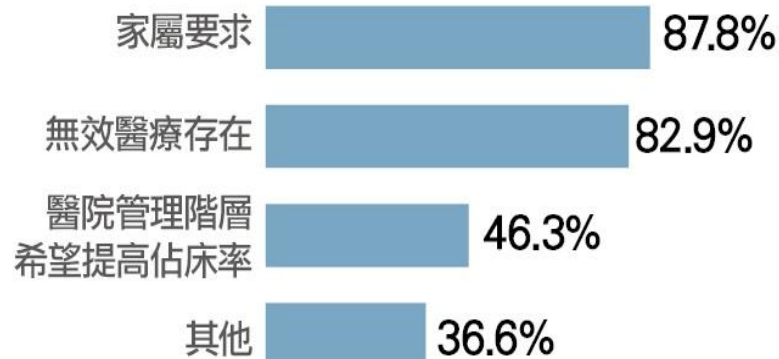
源起

目前醫療文化「至少做一點」的，多半是基
於「無效醫療存在」，且
多做」

近九成醫師認為，「家屬要求」
造成台灣醫療被過度使用

台灣醫療有某種程度上過度使用，你認為造成
這種現象的原因是？

家屬要求 ▇▇▇▇▇▇ 87.8%

無效醫療存在 ▇▇▇▇▇ 82.9%
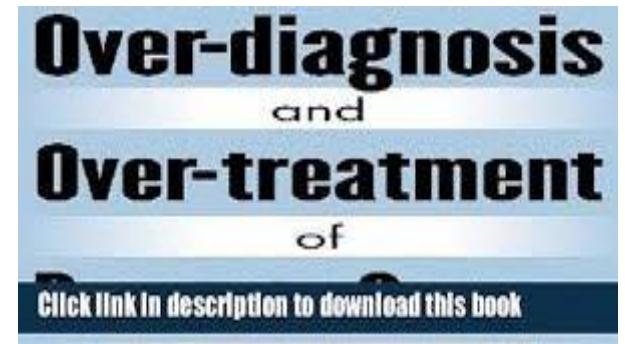
醫院管理階層
希望提高佔床率 ▇▇▇ 46.3%

其他 ▇▇ 36.6%

大綱

Overdiagnosis and overtreatment?

Choosing Wisely的緣起

Take home message

Overdiagnosis and overtreatment

Overdiagnosis and overtreatment

Overuse*

Overdiagnosis
and diagnosis of abnormalities not related to disease (false positive results)

Overtreatment
Overdiagnosed disease
Wrong practice
Unwanted care

* including overtesting and other unnecessary medical evaluations
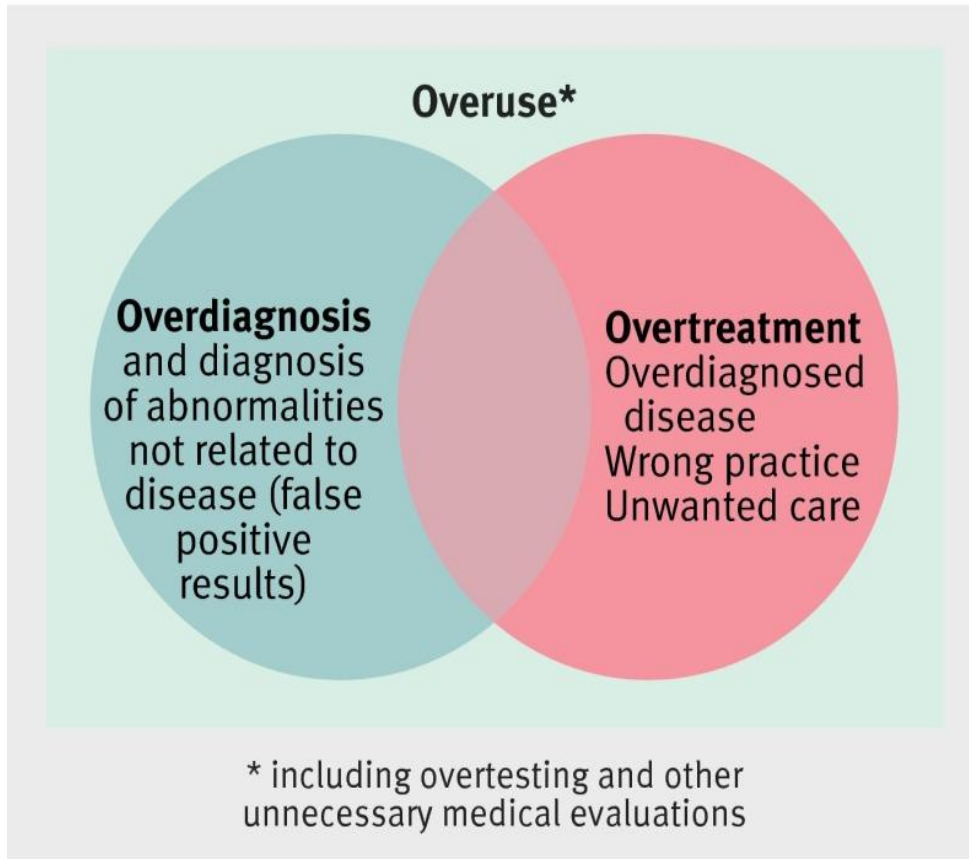
Overdiagnosis...(What it is)

- 定義：

- 提早診斷出不會造成傷害的問題或因過度展延的疾病定義而形成診斷。

- not a false positive

- two major causes overdetection and overdefinition of disease.

Brodersen J, Schwartz LM, Heneghan C, *et al. BMJ Evidence-Based Medicine* 2018;23:1–3.
Carter, et al., Public Health Research & Practice 2017; . 27(3):e2731722

Overdetection

- *Overdetection*
  - ➢identification of abnormalities that were never going to cause harm
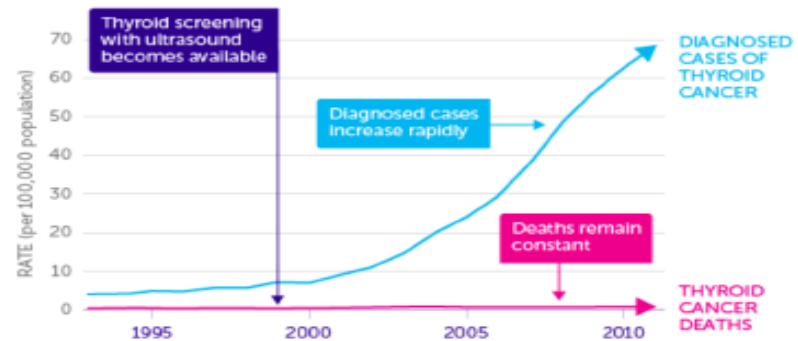 - ➢Increasing use of high-resolution diagnostic technologies

Overdiagnosis的常見醫療問題

20181110黃采薇副教授上課講義

Overtreatment的常見副作用

甲狀腺切除、聲音受損、永久的甲狀腺功能減退、終身服藥、忍受放射性碘治療帶來的副作用，還有長長的疤....

20181110黃采薇副教授上課講義

Lead time bias vs. Length bias

20181110黃采薇副教授上課講義
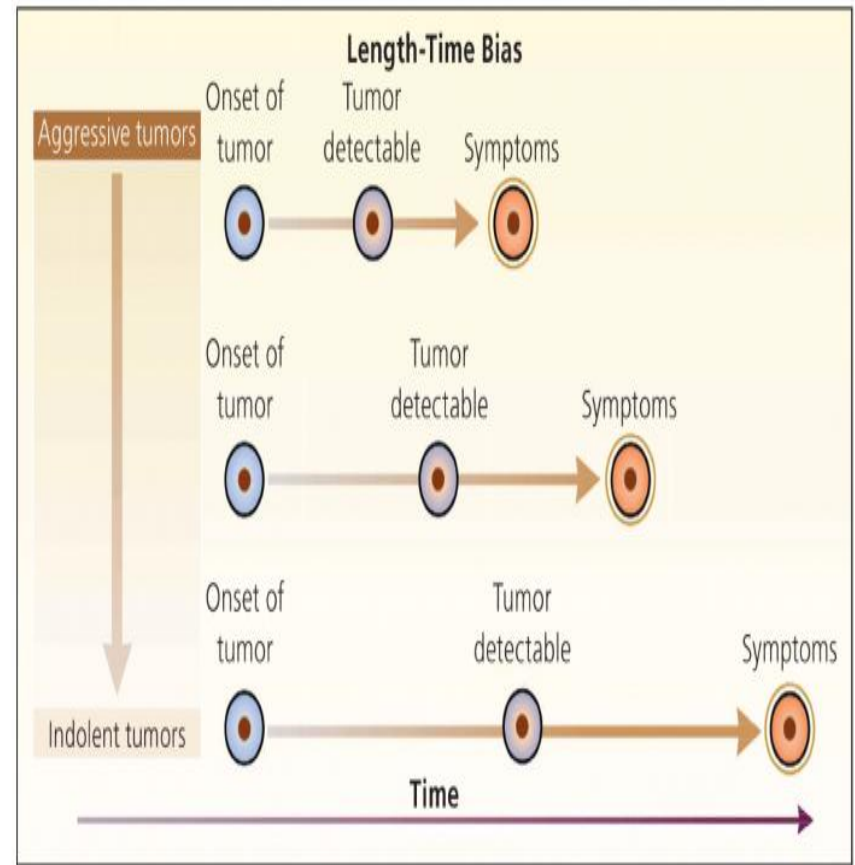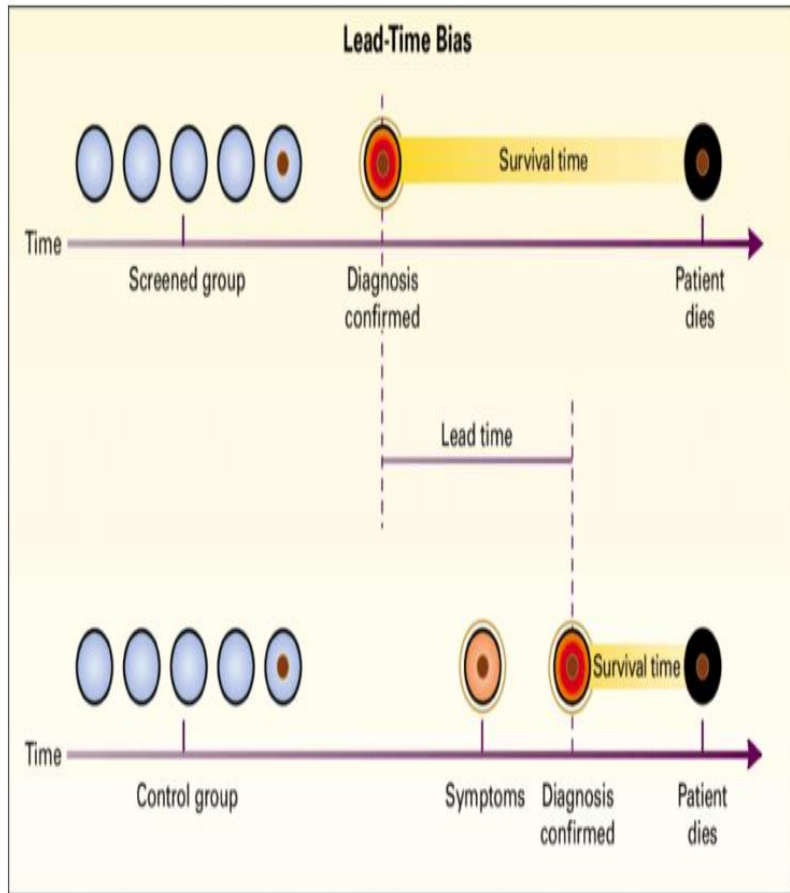
Overdiagnosis
(non-progressive or slow-growing)
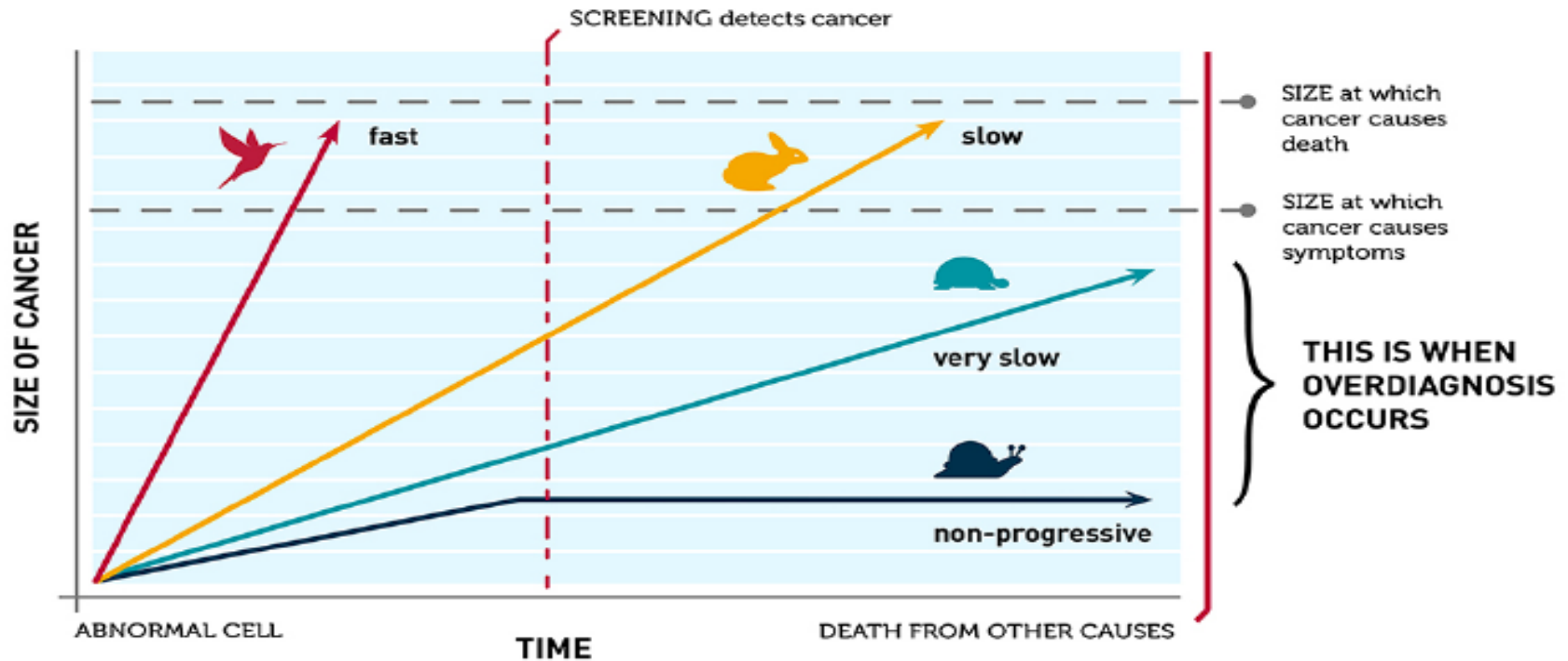
Adapted from a figure courtesy of
H. Gilbert Welch, Dartmouth Medical School

prevention.cancer.gov

20181110黃采薇副教授上課講義

Causes overuse of medical care

Table 1| Provider and patient factors identified as causing overuse of medical care

Intrinsic	Extrinsic
Provider driven	
Belief more care is bette...	相信多做不會錯
Lack of knowledge of har...	
Discomfort with uncertainty	Defensive medicine[1 28]
Poor knowledge of patient preference[53]	Variation in medical and surgical practice[54 55 56]
Regret for errors of omission gr...	缺乏對多做醫療的危險評估
Belief action better than inactio...	
Use of therapeutics "off label"[59]	Guidelines promoting overuse
Over-reliance on pathophysiological and anatomical reasoning	Medical culture[63]
Desire for reassurance[64]	不明確的症狀
Patient driven	
Belief more care is better[7 46 47]	Financial—third party payment shielding from costs[1 45]
Lack of knowledge of harm...	
Discomfort with uncerta...	醫療給付
	Medicalization of non-disease (eg, baldness)[1 48 66]
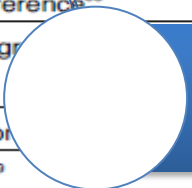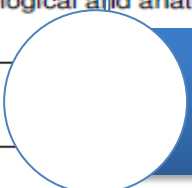
New definition and Prevalence

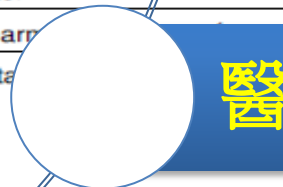Table 1. Changes in Disease Definitions and Prevalence of a Condition

Condition	Population	Previous Definition	Old Definition Prevalence, %	New Definition	New Definition Prevalence, %
Osteoporosis	Community sample of US women aged >65 years[7]	Femoral neck BMD T-score of −2.5 or less	21	NOF 2008 guideline	72
Myocardial infarction	Patients presenting to hospital with a troponin level measure ≥30 ng/L[8]	WHO criteria using MB fraction of creatine kinase	18	ESC/ACC 2000 criteria using troponin	29
Polycystic ovary syndrome	Sample of women aged 12-44 years in China[9]	NIH criteria	7	Rotterdam criteria	11
Prediabetes	Survey of adults aged >18 years in China[10]	Impaired fasting glucose	26	ADA 2010 criteria	50
	NHANES survey of adults ≥18 years in the United States[11]	Impaired fasting glucose	26	ADA 2010 criteria	31

Guidance for Modifying the Definition of Diseases
A Checklist

Jenny Doust, MBBS, PhD; Per O. Vandvik, PhD; Amir Qaseem, MD, PhD; Reem A. Mustafa, MD, PhD; Andrea R. Horvath, MD, PhD; Allen Frances, MD; Lubna Al-Ansary, MBBS, MSc; Patrick Bossuyt, PhD; Robyn L. Ward, MBBS, PhD; Ina Kopp, MD; Laragh Gollogly, MD, MPH; Holger Schunemann, MD, PhD; Paul Glasziou, MBBS, PhD; for the Guidelines International Network (G-I-N) Preventing Overdiagnosis Working Group

Table 2. Checklist of Items to Consider When Modifying a Disease Definition

Checklist Item	
1. Definition: What are the difference... new definition?	**Definition**
2. Number of people affected: How will the new disease definition change the incidence and prevalence of the disea...	The number of people affected is important in understanding benefits, harms, and resources needed.
3. Trigger: What is the trigger for considering... disease definition?	**Number of people affected**
4. Prognostic ability: How well does the new d... clinically important outcomes compared with the p... s definition?	clinically meaningful outcomes.
5. Disease definition precision and accuracy: What is the repeatability, reproducibility, and accuracy (when estimation... new disease definition?	Disease definitions that are repeatable and reproducible improve the consistency of
6. Benefit: What is the incremental benefit fo... the new definition vs the previous definition?	**Triggers**
	be used to determine treatment thresholds.
7. Harm: What is the incremental harm for ...ts classified by the new definition vs the previous definitio...	Harms may also be outlined using methods such as GRADE. It is often more difficult
8. Net benefit and harms: What is the... classified by the new definition vs the p...	**Prognostic ability**

Choosing Wisely

Choosing Wisely的緣起

明智選擇運動（Choosing wisely campaign）

2012年由美國內科醫學會（American Board of Internal Medicine, ABIM）

鼓勵醫病共同討論<u>沒有必要執行</u>的醫療行為

Choosing Wisely

Choosing Wisely is a campaign to help <u>clinicians</u> <u>and patients</u> engage in conversations about <u>unnecessary tests and treatments</u> and <u>make</u> <u>smart and effective choices</u> to ensure high-quality care.

MORE IS
NOT
ALWAYS
BETTER

CHOOSE **WISELY**

Choosing Wisely

Choosing Wisely®
An initiative of the ABIM Foundation

5 QUESTIONS to Ask Your Doctor Before You Get Any Test, Treatment, or Procedure

1 **Do I really need this test or procedure?** Medical tests help you and your doctor or other health provider decide how to treat a problem. And medical procedures help to actually treat it.

2 **What are the risks?** Will there be side effects? What are the chances of getting results that aren't accurate? Could that lead to more testing or another procedure?

3 **Are there simpler, safer options?** Sometimes all you need to do is make lifestyle changes, such as eating healthier food or exercising more.

4 **What happens if I don't do anything?** Ask if your condition might get worse — or better — if you don't have the test or procedure right away.

5 **How much does it cost?** Ask if there are less-expensive tests, treatments or procedures, what your insurance may cover, and about generic drugs instead of brand-name drugs.

http://www.choosingwisely.org/wp-content/uploads/2018/03/5-Questions-Poster_8.5x11-Eng.pdf

國內的**choosing wisely campaign**

1 疑似病毒引起的上呼吸道感染，不建議使用抗生素治療。

2 不建議健康的年輕病人在手術前進行常規性胸部X光檢。

3 未經危險因子評估的停經後婦女，不建議常規進行骨密度檢測，來評估骨質疏鬆性骨折的風險。

4 不要以苯二氮平類（benzodiazepines）藥物治療有失眠、焦慮或譫妄的老年病人。

5 若直系家庭成員沒有前列腺癌的病史，不需要常規執行攝護腺特異抗原（PSA）篩檢。

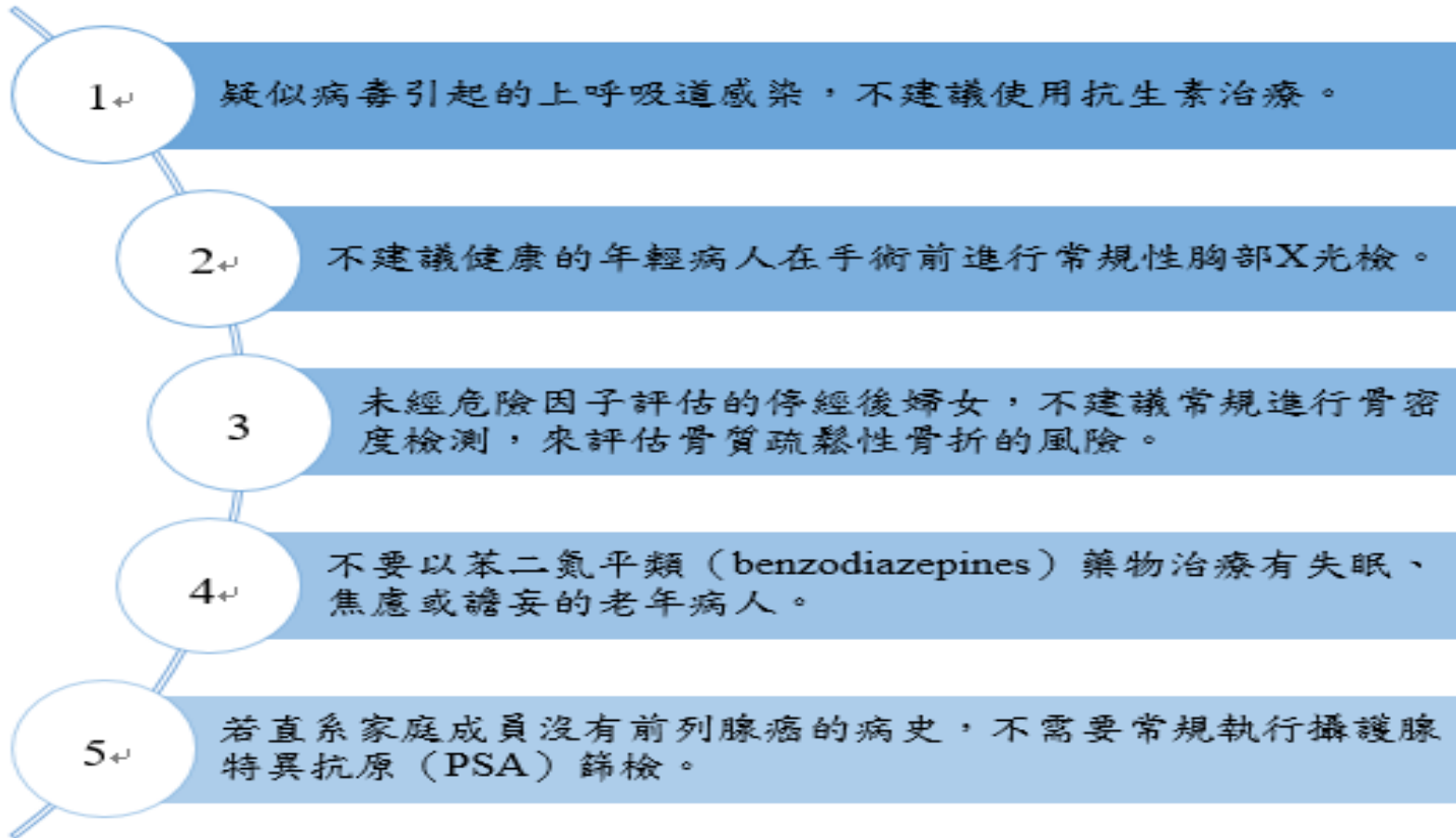圖 1 國內前五項不建議執行醫療服務項目

從不同角度看過度醫療(overuse)行為

無效醫療(Ineffective care)

從醫療觀點來看

口服抗生素治療一般感冒

術前常規shaving

無症狀的常規心電圖檢查

無效醫療(Ineffective care)

從醫療觀點來看

病人在加護病房只是短暫延後生命

醫療照顧耗費大量人力，對病人效益不大

無益醫療(Inefficient care)

醫療有效，但執行強度或頻率不恰當

重覆抽血診斷或檢驗

使用重症醫療照顧輕微疾病

常規使用後線抗生素

不想要醫療(Unwanted care)

醫療建議適當，但病人不想要

病人想要緩和治療，醫師建議進一步治療

高齡病人接受前列腺癌篩檢

自費使用高價藥物或疫苗

Low-value care/overuse

無效醫療 (Ineffective care)	政府機關	不給付、限制(Limit)
無益醫療 (Inefficient care)	醫療機構	減少重覆或複合處方 (Lean)
不想要醫療 (Unwanted care)	病人	醫病共享決策(Listen)

Take home message

如何判斷

Over-diagnosis or Over-treatment

該疾病的盛行率

提早診斷疾病後，治療的好處與壞處

該疾病的嚴重程度

該項篩檢(screening)特異性、精準度如何？

確診後，是否有能力去處理疾病問題？

雙和醫院譚家偉主治醫師

Take home message

抗生素**overuse**問題

routine造成的**overuse**

擴大疾病定義，造成**overdiagnosis**

Take home message

Overdiagnosis造成過度恐慌及副作用

文化上差異，造成**overuse medical care**

推動精準醫療與**SDM**的重要

報告結束 謝謝聆聽