# 出國報告(出國類別:進修)

# 預防醫學實證化及其發展趨勢

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# 摘要

面對醫學之能急遽上升的普羅大眾及醫療經費有限的大環境,如何提供實證化的預防醫學,來預防疾病,以及達到早期發現,早期治療的目的,同時避免因過度檢查而使民眾暴露於不必要的風險中,適逢台灣逐步將醫療服務數位化,如何分析統計處理這些數據,進而形成政策,為此次進修之目的之一。另外,透過修習各種跨領域及學門的課程修習(例如經濟模型、倫理學等),將可以更全面的看待各項健康議題,如老化及肥胖等,進而形成兼具考量國內民情的醫療政策,特別是應用在軍陣的選兵醫學及預防醫學上。

目次		
1.	封面	(1)
2.	摘要	(2)
3.	目次	(3)
4	本文	(4)
1)	目的	
2)	619 過程	
<i>Z)</i>	· — !—	(1)
3)	心得及建議	([

#### 目的

約翰霍普金斯大學彭博公衛學院為世界首屈一指的學術殿堂,透過參與其預防醫學(含實習)的相關課程,了解如何從大量的醫療數據中,抽絲剝繭地利用統計分析的技巧,獲得具科學實證的醫療建議,甚而形成醫療政策的過程。也參與彭博公衛學院相關課程的修習,拓展跨學科及領域的視野,進而對目前所從事之臨床醫療及軍陣預防醫學有所助益。

#### 過程

#### 預防醫學訓練課程

實際參與彭博公衛學院預防醫學住院醫師相關的訓練,該項課程是一個為期兩年的培訓計劃,訓練醫師足以主導各地公共衛生的能力。每天有既定的晨會,門診及病房醫療工作,因不具備美國醫師資格,所以僅能以實習生的身分,參與臨床醫療的討論,每周有排定雜誌討論議題,每個住院醫師手上皆有一個專題計畫在執行,議題以各項醫療處置是否有證據醫學支持的 metaanalysis 為主。

他們訓練的內容是以在地人口為基礎,如何分析醫療服務的數據,以健康的設計,管理和再評估的理論,實踐和臨床知識,提出可行的預防醫學政策,達到當地居們醫療品質的提升, 進而衍生健康促進的方案。

該項訓練課程的目標是所有結訓的醫師都必須具備下列能力:

- 1.結合臨床醫療資訊和當地人群結構,分析及擬定預防疾病和促進健康的能力。
- 2.具備從地方到國際的角度來發掘廣泛的健康議題,
- 3.具備所需要的統計分析能力,去發現對公眾健康有影響的議題。
- 4.具備為解決弱勢人群的整體健康需求所需要的管理和流行病學技能。
- 5.具備治療嚴重影響弱勢人群特殊疾病所需的臨床技能。

#### 修習公衛學院課程

職也利用參與預防醫學訓練的空檔,修習了數門醫療政策及管理的課程,授課老師都是一時之選,接觸議題之廣(例如考量經濟效益、模擬分析模型),實在讓一直從事醫療工作實務我大開眼界,加上彭博公衛學院接受各界的資助,研究議題常針對非洲、南美洲等落後地區,從傳統的流行病學、臨床治療,進而分子生物學的基礎研究,文化倫理議題皆囊括其中,甚而多個計畫是涵蓋氣候變遷所影響的傳染病的公衛防治,再再不禁讓人讚嘆這裡不愧為美國,甚至是世界首屈一指的學術殿堂,其關心議題之全面而廣泛,足以讓人嘆為觀止。

#### 下列為職所修習之課程名稱及內容

1) The Art of Science Advice to Policy Makers: Lessons from the U.S. National Academies 課程的老師 Fineberg 博士曾擔任 Johns Hopkins 醫學院院長,在這課程中他分享了個人經驗,如何利用領導風格來制定健全和有說服力的政策建議的專業見解。

#### 2) Approaches to Managing Health Services Organizations

世界各地的從事醫療專業人士所面臨的壓力與日俱增,這壓力不僅僅來自於所遇到的病人,還包含所處的社區及政府。控制成本,提供高品質的醫療照護,確保醫療機會均等,並提高病人的滿意度已經成為主導的問題。此外,越來越多的醫療服務服務是跨學科及多團隊來提供的,並且須整合複雜的行政組織和控管財務平衡。各國醫療的財政支出和其他資源限制捉襟見拙的國家或地區比比皆是。醫療機構的管理者面對這些挑戰時,除了臨床經驗外,更需要領導能力和管理技能,才能一一克服並超越這些關卡。

SECTION 1		
Leadership & Management: Nominal Group	Michael Brassard and Diane Ritter. Nominal	
Technique	Group Technique.The Memory Jogger II: A	
	Pocket Guide of Tools for Continuous	
	Improvement and Effective Planning. (First	
	Edition) Methuen, MA: Goal/QPC, 1994.	
SECTION 2		
Organizational Foundation & the Environment:	Atkinson S, Haran D. Back to basics: Does	
SWOT Analysis of an Organization in Transition	decentralization improve health system	
	performance? Evidence from Ceara in north-east	
	Brazil. Bull WHO 2004; 82: 822-827.	
	Bossert T. Analyzing the Decentralization of	
	Health Systems in Developing Countries:	
	Decision Space, Innovation and	
	Performance. Soc Sci Med 1998; 46(10):	
	1513-1527.	
	Bossert TJ, Beauvais JC. Decentralization of	
	health systems in Ghana, Zambia, Uganda and	
	the Philippines: a comparative analysis of	
	decision space. Health Policy Plan 2002; 17(1):	
	14-31.	
SECTION 3		
Leadership & Management: Common Currency	Educational Objectives:	
	Learn the basic principles of	

	·
	cooperative-competition
	Discover how cooperative-competition helps
	teams and individuals achieve the greatest results
	Develop the team and interpersonal skills that
	drive cooperative-competition
	Understand how cooperative-competition benefits
	the entire organization
SECTION 4	
Developing a Budget	Educational Objectives:
	Calculate a budget based on information about
	business or service volume, staffing levels, salary
	rates, and supply usage and costs
	Communicate appropriately relative to budget
	data
	Work with others collaboratively in developing
	or obtaining data they need to prepare and
	interpret an integrated budget
SECTION 5	
Improving a Key Work Process	Michael Brassard and Diane Ritter. Flow
	Charts. The Memory Jogger II: A Pocket Guide of
	Tools for Continuous Improvement and Effective
	Planning. (First Edition) Methuen, MA:
	Goal/QPC, 1994.
SECTION 6	
Leadership & Management: Friday Night in the	Educational Objective:
ER	Manage uncertainties and stress in dynamic
	hospital management simulation
SECTION 7	
Balanced Scorecard - Organizational	Peters, D.H., Noor, A.A., Singh, L.P., Kakar,
Performance Results	F.K., Hansen, P.M., Burnham G. A Balanced
	Scorecard for Health Services in
	Afghanistan.Bulletin of the World Health
	Organization2007, 85: 146-151.
SECTION 8	· ·
Leadership & Management: The Abilene Paradox	Educational Objectives:
	To recognize the paradox of mismanaged
	agreement, and how it contributes to poor group

decisions
To initiate measures to help groups avoid making
counter-productive decisions

#### 3) Healthy issues for Aging Populations

該項課程介紹老化,及其對個人,家庭和社會,和背景有關老年人健康政策的研究。從不同角度提供對於老化的概述:人口學,生物學,疾病流行病學,生理和心理失調,機能和殘疾,健康服務,聯邦和州衛生政策,老齡化社會問題,以及在老年人的護理倫理問題。

這門課讓學生了解老年人各種健康問題,以及他們的醫療服務提供者所必須注意到的議題,並預測未來十年世界高齡化的社會面貌。其中包括高齡化人口的生理,基本健康和心理健康問題的理解,以及如何產生政策決策,州和聯邦政府將需要解決相關的這些問題。

課程		
1. Introdu	ection	
2. Demog	raphy of Aging	A Profile of Older Americans: 2005,
		Administration on Aging. US Department of
		Health and Human Services (DHHS)
		For extensive census data on older persons,
		look at:65+ in the United States: issued
		December 2005. Current Population Reports,
		Special Studies. US DHHS
3. Biolog	ical Basis and Clinical Aspects of Aging	National Institute on Aging, National
		Institutes of Health. Aging under the
		Microscope: a biological quest. NIH, 2006
		National Institute on Aging, National
		Institutes of Health. Research Programs
		(Extramural).
		National Institute on Aging, National
		Institutes of Health. Intramural Research
		Program.
4. Physica	al Disorders Associated with Aging	Federal Interagency Forum on Aging-Related
		Statistics, 2006. Older Americans 2006: Key
		Indicators of Well-Being. Health Status,
		Health Status Indicators. (Chapters on health
		status and health risk behaviors)
		Fried LP, Tangen CM, Walston J, et al.
		Frailty in older adults: evidence for a

	phenotype. J Gerontol A Biol Sci Med Sci 2001;56:M146-156  Manton KG, Gu X. Changes in the prevalence of chronic disability in the United States black and nonblack population above age 65 from 1982 to 1999. PNAS 2001;98:6354-6359  Partnership for Solutions. Chronic conditions: making the case for ongoing care. Johns Hopkins University ,2004.
5. Mental Disorders of Older Persons	Mental Health: A Report of the Surgeon General, Chapter 5, Older Adults and Mental Health. US Public Health Service, 1999 Willis SL, et al., 2006. Long-term effects of cognitive training on everyday functional outcomes in older adults. JAMA 296:2805-14 Black BS, et al. Identifying dementia in high-risk community samples: the memory and medical care study. Alzheimer Dise Assoc Disor 2003;17:9-18. Rabins PV, et al. Effectiveness of a nurse-based outreach program for identifying and treating psychiatric illness in the elderly. JAMA 2000;283:2802-9. Small GW, Rabins PV, Barry PP, et al. Diagnosis and treatment of Alzheimer Disease and related disorders: consensus statement of the American Association for Geriatric Psychiatry, the Alzheimer's Association, and the American Geriatrics
6. Functional Capacity and Disability	Society. JAMA 1997;278:1363-1371  Katz S, Branch LG, Branson MH, Papsidero JA, Beck JC, Greer DS. Active life expectancy. N Engl J Med 1983;309:1218-1224.  Verbrugge LM, Patrick DL. Seven chronic

conditions: their impact on US adults' activity levels and use of medical services. AJPH 1995;85:173-182. Fries JF. Measuring and monitoring success in compressing morbidity. Ann Intern Med 2003;139:455-459. Manton KG. Changes in the prevalence of chronic disability trends United States black and nonblack population above age 65 from 1982-1999. PNAS 2001;98:6354-9. Fries JF. Aging, natural death and the compression of morbidity. N Engl J Med 1980;303:130-135. 7. Health Services for Older Persons: Ambulatory Federal Interagency Forum on Aging-Related and Hospital Care Community-based Long Term Statistics, 2006. Older Americans 2006: Key Care Indicators of Well-Being. Health Status, Health Status Indicators. Health Care Indicators 28-37. Leff B, et al. Hospital at Home: feasibility and outcomes of a program to provide hospital-level care at home for acutely ill older patients. Ann Intern Med 2005;143:798-808. Feder J, Komisar HL, Niefeld M. Long-term care in the United States: an overview. Health Affairs 2000;19:40-56. Burton LC, German PS, Gruber-Baldini AL, et al. Medical care for nursing home residents: differences by dementia status. J Am Geriatr Soc 2001;49:142-147. Boult C, Boult LB, Morishita L, et al. A randomized clinical trial of outpatient geriatric evaluation and management . J. Am Geriatr Soc 2001;49:351-359. Kane RL, Homyah P, Bershadsky B, Flood S. Variations on a theme called PACE. J Gerontol A Biol Sci Med Sci 2006;61:689-693.

Newcomer RJ, Harrington C, Kane R. Implementing the second generation social health maintenance organization. J Am Geriatr Soc 2000;48:829-834. Mui AC. The Program of All-Inclusive Care for the Elderly (PACE): an innovative long-term care model in the United States. J Aging Soc Policy. 2001;13:53-67. Ware JE, Baylis MS, Rogers WH, Kosinski M, Tarlov AR. Differences in 4-year health outcomes for elderly and poor, chronically ill patients treated in HMO and fee-for-service systems JAMA. 1996;276:1039-47. Weissert WG, Hedrick SC. Lessons learned from research on effects of community-based long-term care. J Am Geriatr Soc 1994;42:348-353. 8. Preventive Health for Older Persons Guirguis-Blake J, Calonge N, Miller T, Siu A, Teutsch S, Whitlock E. For the U.S. Preventive Services Task Force (USPSTF), 2006. Refining Evidence-based Recommendation Development, Current Processes. US Preventive Services Task Force, 2006. Recommendations. Rowe JW, Kahn RL. Successful aging. Gerontologist 1997;37:433-440. German PS, Burton LC, Shapiro S, et al. Extended coverage for preventive services for the elderly: response and results in a demonstration population, Am J Public Health 1995;85:379-386. Burton LC, Steinwachs DM, German PS, et al. Preventive services for the elderly: would coverage affect utilization and costs under Medicare? Am J Public Health 1995;85:387-391.

9. Family Caregiving for Patients with Long Term	Sorensen S, Pinquart M, Duberstein P. How
Care Needs	effective are interventions with caregivers?
	An updated meta-analysis. Gerontologist
	2002;42:356
	Schulz R, Beach SR, Lind B, et al.
	Involvement in caregiving and adjustment to
	death of a spouse: findings from the
	Caregiver Health Effects Study. JAMA
	2001;285:3123-3129
	Wolff JL, Kasper PD. Informal caregiver
	characteristics and subsequent hospitalization
	outcomes among recipients of care. Aging
	Clinical Experience and Research
	2004;16:307-313
10. Federal and State Health Policies for Older	Spillman BC, Lubitz J. The effect of
Persons	longevity on spending for acute and
	long-term care. N Engl J Med.
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	Thomas C, Sussman J. Medicare Part D:
	Successes and Continuing Challenges.
	Impact of Medicare Part D on Massachusetts
	Health Programs and Beneficiaries Mass
	Health Policy Forum Issues Brief
	2007;32:1-32.
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	United States: policy issues and model
	programs of integrated care. Int J Integrated
	Care 2003;3:1-11
	Meara E, White C, Cutler DM. Trends in
	medical spending by age, 1963-2000. Health
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	Foote SM. Population-based disease
	management under fee-for-service Medicare.
	Health Affairs, Web-exclusive, 2003
	Spillman BC, Lubitz J. New estimates of
	lifetime nursing home use: have patterns of
	use changed? Med Care 2002;40:965-75
	Cuellar AE, Wiener JM. Can social insurance

	for long-term care work? The experience of
	Germany. Health Affairs 2000;19:8-25
11. Ethical Issues in Long-term Care	Schneiderman LJ, Gilmer T, Teetzel HD, et
	al. Effects of an ethics consultations on
	nonbeneficial life-sustaining treatments in
	the intensive care setting: a randomized
	controlled trial. JAMA 2003;290:1166-1172.
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	Oregon and beyond. N Engl J Med
	2005;352:1627-1630.
	Thomasma DC. From ageism toward
	autonomy. in: Binstock RH, Post SG,
	eds.Too Old for Health Care? Controversies
	in Medicine, Law, Economics, and
	EthicsBaltimore, MD: Johns Hopkins
	University Press, 1991.
	Council on Scientific Affairs and Council on
	Ethical and Judicial Affairs, American
	Medical Society. Persistent vegetative state
	and the decision to withdraw or withhold life
	support JAMA 1990;263:426-430.
	Callahan D.Setting Limits: Medical Goals in
	an Aging Society.New York: Simon and
	Schuster, 1987.
12. Social Aspects of Health and Aging	Baltes PB, Smith J. New frontiers in the
	future of aging: from successful aging of the
	young old to the dilemmas of the fourth age.
	Gerontology. 2003;49:123-135.
	Rodin J. Aging and health: effects of the
	sense of control. Science. 1986:1271-1276
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	TE. From social integration to health:
	Durkheim in the new millennium. Social
	Science and Medicine 2000;51:843-857.

# 4) Introduction to Health Policy

這門課介紹涵蓋衛生政策與管理的幾項切點。它著重於透過四個實質性領域的切入,如何形成許多在衛生政策和管理問題的分析基礎。這四個領域分別是:(1)經濟學和金融,(2)需

要和需求,(3)政治/倫理/法律,以及(4)質量/效率。而且說明了如何使用三個面向的具體政策來解決這些問題。這三個面向分別是:損害、醫療保健,以及公共衛生準備。

	1		
Mod	Module 1: The Rational Public Health Policy Process		
1	What Public Health Policy DoYouWant to Change? (Anderson)		
2	Assessing Need and Demand for Health Care (Anderson)		
3	Historical, Legal, and Ethical Perspectives on Public Health Policy (Anderson)		
4	Economic and Financial Considerations in Health Policy (Anderson)		
5	Evaluation and Assessment of Health Policy (Anderson)		
6	Two Frequently Asked Questions (Anderson)		
Mod	lule 2: Delivering Medical Care		
1	Health Policy and the Delivery of Health Care: Case Study 1 (Weiner)		
2	Health Policy and the Delivery of Health Care: Case Study 2 (Weiner)		
Mod	Module 3: Injury Prevention and Trauma Care		
1	Setting the Stage: The Burden of Injury and Strategies for Intervention (MacKenzie)		
2	How Did an Airbag Get Into My Steering Wheel: A Case Study in Injury Prevention Policy		
	(Frattaroli)		
3	Funding Trauma Centers: Using the Bardach Framework to Develop a Rational Policy		
	(MacKenzie)		
Module 4: Emergency Preparedness			
1	Public Health Preparedness Policies: Pre-9/11 Policies (Burke)		
2	Public Health Preparedness Policies: Post-9/11 Realities and Future Directions (Burke)		

### 5) Fundamentals of Program Evaluation

這門課是相當活潑且實用的課程設計,參與的學員必須事先研讀與討論的文章,再根據各自主題,提出評估的框架及指標,對於醫療政策的擬定、評估及修正,有相當實用的技能及觀念。

課程	討論材料
1.Overview of evaluation concepts	
2.Overview of evaluation concepts (cont.); TB	Jane T. Bertrand and Gabriela
Control Program in Baltimore City: Presentation	Escudero.Compendium of Indicators for
of a domestic program	Evaluating Reproductive Health Programs.Chapel
	Hill, NC: Carolina Population Center,
	MEASUREEvaluationProject, 2004: Pp. 1-14.
	Jane T. Bertrand. Evaluating Health
	Communication Programs.Drum Beat, June 2005.
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3. Overview of evaluation concepts (cont.); Stop	Andrew Fisher, James Foreit, et al.Designing
AIDS Love Life in Ghana: Presentation of a n	HIV/AIDS Intervention Studies: An Operations
international program	Research Handbook.New York: Population
	Council, 2002: 1-44, 73-84
	"Context and Content of Condom Negotiation
	and Sex Refusal Skills among Youth in Ghana."
	Report on Qualitative Research Using a
	"Storyline" Methodology. November 1997.
4.Developing a conceptual framework and	J.A. Earp, and S.T. Ennett.Conceptual models for
introduction to formative research	health education research and practice. Health
20001101	Educ Res1991;6:163-171.
	Assessing the Need for Programs. In: J. McDavid
	and L. Hawthorn, Program Evaluation and
	Performance Measurement. Thousand Oaks,
	CA: Sage Publications. 2006.
5.Communication pretesting, needs assessment	SS Weir, et al. A pilot study of a rapid assessment
(U.S.); MCH needs assessment: An overview	method to identify places for AIDS prevention in
	Cape Town, South Africa.Sex Transm
	Infect2002;78(suppl 1):i106-i113
	CC Johnson, et al. Profiles of the adolescent
	smoker: models of tobacco use among 9th grade
	high school students. Acadiana Coalition of
	Teens against Tobacco (ACTT).Preventive
	Medicine2004;39:551-558.
6.Development of indicators and participatory	Jane T. Bertrand and Gabriela
evaluation methods	Escudero.Compendium of Indicators for
	Evaluating Reproductive Health Programs. Chapel
	Hill, NC: Carolina Population Center,
	MEASUREEvaluationProject, 2004: (vol 1) pp.
	ix-xiv; and Appendix B. (vol 2, pp. B-462 to
	463).
	Who Are the Question Makers? - A Participatory
	Evaluation Handbook, UNDP.
7.Process evaluation	RP Saunders, MH Evans, J Praphul.Developing a
	Process-Evaluation Plan for Assessing Health
	Promotion Program Implementation: A How-To
	Guide.Health Promotion Practice2005;6:
	134-147.

	CI Viadro. Designing a Process Evaluation for a
	Comprehensive Breast Cancer Screening
	Intervention: Challenges and
	Opportunities. Evaluation and Program
	Planning1997;20:237-249.
8.Routine health information systems: concepts	Theo Lippeveld.Design and Implementation of
and methods	HIS.Geneva: World Health Organization, 2000.
	Chapters 1, 2, 3, and 14.
9.Monitoring outputs and outcomes and	Andrew Fisher, James Foreit, et al.Designing
introduction to study design	HIV/AIDS Intervention Studies: An Operations
	Research Handbook.New York: Population
	Council, 2002: pp. 45-71
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	Sales to Minors Through Electronic
	Age-Verification Devices: A Field Effectiveness
	Study.J Pub Health Policy2004;24(3/4):251-268.
10.Experimental, non-experimental, and	DL Kincaid, et al.Impact of a Mass Media
quasi-experimental designs	Vasectomy Promotion Campaign in
quasi emperimentar designs	Brazil.International Family Planning
	Perspectives 1996;22:169-175.
11.Using qualitative methods for monitoring and	Debus, Mary.Handbook for Excellence in Focus
evaluation	Group Research. Washington, DC: Academy for
	Educational Development, 1998.
12.Randomized control trials	RN Shain, JM Piper, et al.A Randomized
	Controlled Trial of a Behavioral Intervention to
	Prevent Sexually Transmitted Disease Among
	Minority Women. The New England Journal of
	Medicine1999;340:93-100.
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	and major trauma related to gravitational
	challenge: systematic review of randomized
	controlled trials.BMJ2003;327:1459-1461.
13 Cost affactivances analysis	Irene Huse, James C. McDavid, and Laura
13.Cost effectiveness analysis	
	Hawthorn. Concepts and Issues in Economic Evaluation. In: McDavid and Hawthorn
	(eds)Program Evaluation & Performance
	Measurement: An Introduction to
	Practice. Thousand Oaks, CA: Sage Publications,

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#### 6) Obesity Economics

這課程向學生介紹了如何以經濟學的方法來評估肥胖議題。它聚焦在肥胖所應佔醫療保健支出,調整後生命人年的品質,生育率的變化,消費者主權的影響,以及可以用來改變成年人,父母和兒童行為的激勵措施機制和規定。

課程	討論題材
Session 1: Obesity Economics	Frank RH. The Economic Naturalist
Session 2: Basic Facts of Obesity as Presented by	Finkelstein Chapters 1 & 4
Finkelstein	
Session 3: Consumers, Incentives, and Weight	Finkelstein Chapters 3, 5, and 6
Session 4: Limitations of Consumer Sovereignty	Finkelstein Chapter 2
Session 5: Role of Government and Potential	Finkelstein Chapters 7-10
Policies	
Session 6: Who Benefits from Obesity?	Finkelstein Chapter 11

- Frank RH. *The Economic Naturalist: In Search of Explanations for Everyday Enigmas*. Basic Books, 2008
- Finkelstein E, Zuckerman L. <u>The Fattening of America: How the Economy Makes Us Fat, If It Matters, and What To Do About It.</u> John Wiley & Sons, 2008
- Kessler D. *The End of Overeating: Taking Control of the Insatiable American Appetite.* Rodale Books, 2009

#### 心得及建議

#### 預防醫學訓練

預防醫學的概念與角色,隨著民眾知識的提升及大環境的改變(例如健保資源有限、人口高齡化及醫療需求逐年增加等因素),越來越被強化及重視,如何利用證據醫學的概念,配合大量醫療數據的分析,形成一強而有力的醫療建議,不再只是醫療專家意見等級的建議,而是兼顧台灣本地民眾就醫文化、醫療工作者概念及醫療機構實際操作,符合現今台灣醫療現況的預防醫學建議的建立,實是刻不容緩,甚而可以延伸至政策形成,建構衛教系統及內容,藉由大眾傳播媒體、現有衛教知能宣傳管道,例如(各區之健康服務中心、各級公私立醫院),來加以宣傳,讓有限的醫療經費,不僅用在刀口上(即急重症的急性醫療),更能挹注在發揮經費資源十倍效果的預防醫學,如此,不僅解決醫療資源主管機關的困擾,不再如此為急速攀升的預算赤字傷神如何籌措新的財源,民眾不僅不需面臨健保費用提升的風險,更透過預防醫學的介入,即早發現疾病,即早治療,有了本土證據醫學的背書,也不用因過度恐懼,陷自身於太多不必要的醫療檢查風險中。對醫療服務提供者,投入預防醫學也有適當的經費收入得以支持相關的醫療服務,不再是僅依賴醫療事業犧牲奉獻的熱情,而是創造一可長可久的三贏局面。

#### 修習課程

國軍這幾年致力於將袍澤年度體檢資料數位化,若能有效結合健保資料及年度體測資料,將這些資料歸人串檔後,做縱貫性的追蹤,預計將可達成下列成果:

- 1.可作為將來全面募兵制所需之選兵醫學的依據,訂定體格標準,於招募時篩選適任人才, 避免受訓時發生意外或因體能因素退訓之情事。
- 2.藉由體檢資料、健保資料庫及體測資料的串檔,可以擬定具科學實證的體測標準及作為各 軍總部隊訓練之科學化依據,不僅保護國軍弟兄,也達到建軍備戰之準備。
- 3.針對個特性不同之軍種,擬定預防傷害的策略及措施,確保國軍袍澤暴露於不必要之傷害 風險下。
- 4.針對國軍體檢常見之亞健康議題,例如肥胖,配合各部隊特性,擬定健康促進策略。