ALLERGY IN HONG KONG – AN UNMET NEED IN SERVICE PROVISION AND TRAINING
(EXECUTIVE SUMMARY)
香港過敏病專科服務和專業培訓 – 供不應求的情況

(中文版是根據英文原文翻譯而來，這只是部份重點摘要，有疑問請參考英文版或全文版)

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Declarations of interest
CKW Lai, CS Lau, TF Leung, YY Wu are consultants or serve on advisory boards and/or receive travel expenses and lecture fees to attend international meetings from various pharmaceutical companies. TH Lee is President elect of Hong Kong Institute of Allergy and Honorary Clinical Professor, The University of Hong Kong. Dr Marco Ho is Chairman of Allergy HK..
The Allergy Alliance is a group of individuals with an interest in allergy drawn from academia; HA hospitals; private practitioners; representative from HA; Hong Kong Institute of Allergy; HK Thoracic Society; Allergy HK; patients and drug company representatives.

1.1 WHAT IS ALLERGY AND HOW COMMON IS IT? An allergic reaction occurs when the immune system reacts inappropriately to otherwise harmless substances. Many children in HK have allergic diseases and the rate of the potentially fatal type of allergy, i.e. anaphylaxis, is high (700/100,000 of the population aged 14 years or less). Rhinoconjunctivitis and eczema are on a rising trend. Many children have food allergies which can be fatal; 15.6% had anaphylaxis. Food allergy also seems to be increasing. The prevalence of asthma has stabilized and may even be decreasing a little, but hospitalizations at both extremes of age remained high. There is very little data on the prevalence of allergic diseases in adults in HK. But only a minority of children will grow out of their allergic diseases so the problem will persist into adulthood. There are no grounds for optimism that the allergic disease burden would be substantially reduced in the adult population.	1.1 什麼是過敏？過敏有多普遍？ 當一個免疫系統對一些無害的物質產生不適當的反應，這就是過敏反應了。香港有很多孩子患有過敏病，而 10 萬個 14 歲以下小童當中，就有 700 個患上可以致命的過敏症（如過敏性休克）。 患上鼻敏感和濕疹的人數也有上升的趨勢；15.6%患上食物過敏的小孩曾經遇過可以致命的過敏性休克；患上食物過敏的人數也在上升。 哮喘的流行度有緩和甚至減少的跡像，不過因為哮喘導致的住院率仍然很高。 香港非常缺乏關於成人過敏病人的研究資料。很少兒童過敏病人可以因爲成長而完全擺脫他們的過敏病，過敏症會伴隨他們進入成年階段，而因過敏疾病對醫療系統帶來的衝擊會持續到成人科。
1.2 WHAT IS ALLERGY AND CLINICAL IMMUNOLOGY? Allergy and Clinical Immunology is a sub-specialty of Internal Medicine and/or Paediatrics. Most patients with allergies have multi-system involvement. Instead of consulting multiple specialists, care can often be streamlined under one Allergy-trained specialist making it easier for patients and often saving on resources. The Allergist's approach aims to correct the underlying cause and they are uniquely positioned to help patients understand how to prevent allergic diseases from developing.	1.2 什麼是過敏和臨床免疫學？ 過敏和臨床免疫學是內科和/或兒科中的一個“亞專科” 很多過敏病人會患上多種過敏症。與其諮詢不同的專科醫生，過敏專科醫生可以為過敏病人提供一條龍的治療服務，這樣可以更加方便病人和更有效地運用資源。過敏科醫生會從根本出發，治療過敏病兼且可以讓病人知道怎樣預防過敏病。

1.3 HOW MANY ALLERGISTS ARE THERE IN HK?	1.3 香港有多少個過敏科醫生？
There are very few registered Allergists in HK (overall about 1:1.46 million head of population). This ratio is low compared to international figures. The ratio of paediatric Allergists per head of population is around 1:460,000 and the ratio for Allergists per adult patients is 1:2.8 million, so there is a severe lack of adult Allergists and paediatric Allergists only work a fraction of their time on allergy.	香港只有很少醫委會註冊過敏免疫專科醫生（1：146 萬人口），這個比率比起國際數據為低。現在兒科過敏免疫醫生對人口的比率約為 1：46 萬人。而成人過敏醫生對成人病人的為 1：280 萬人，所以成人過敏醫生是極之缺乏的，而兒科過敏醫生又要兼顧其他工作，只可以用部份時間去看過敏症。
There are no Allergists in adult medicine in public hospitals. Many patients with allergies are seen by General Practitioners and non- specialists in Allergy. In the absence of Allergists patients may suffer because they may find it hard to get state-of-the-art medicine and diagnostics.	公立醫院並沒有成人內科過敏免疫專科醫生，很多過敏病人都是到普通科或非過敏專科求醫，因為缺乏過敏科醫生，病人有可能未能獲得最好的診斷與治療。
Unproven diagnostic procedures and therapies could be introduced if mainstream medicine is unavailable, or conventional tests could be used / interpreted inappropriately if there are no specialists.	因為缺乏過敏專科醫生提供主流兼有實證的診斷及治療方法，一些未經證實的方法或被輕易採納，並引進給病人，有機會導致診療失當。
If there is a lack of Allergy specialists, it becomes difficult to train future generation of clinicians, researchers and teachers in allergy.	如果缺乏過敏專家，會很困難去培訓下一代過敏科醫生、研究人員和老師。
In HK there are two Medical Council registered Immunologists (S44) who have received some Allergy training. One of them directs a public laboratory service in Immunology and Allergy at QMH and also provides a limited weekly service for drug allergy, while the other runs a HLA typing service and is not involved with allergy. Their budget does not allow a comprehensive menu of relevant tests to support the specialty.	在香港，有兩個醫委會註冊的免疫病理學家曾受過過敏科訓練。一位在瑪麗醫院管理免疫與過敏的公共化驗服務，和每週提供有限度的臨床服務給藥物過敏的病人。而另外一位只負責管理幹細胞或器官移植之白血球血型配對服務，沒有涉足過敏科。他們沒有足夠資金去做全面的測試去支援過敏專科。
These two pathologists are distinct from specialists in Immunology and Allergy (S35) of which there are four, but only two of these are Allergists (both in private practice).	這兩位病理專家並不是屬於過敏免疫專科(醫委會註冊專科編碼 S35)，屬於 S35 四位過敏免疫專科註冊的醫生只有兩位在私人診所或醫院提供臨床過敏服務。

1.4 ALLERGY SERVICES IN HONG KONG	1.4 香港的過敏科服務
Delivery of allergy services in public hospitals is limited and fragmented. Existing Allergy services are led mainly by non-specialists. There is no dedicated Allergy clinic for adults in the public sector. Paediatric Immunology and Infectious Disease (PIID) specialty has given some cohesion by developing a network of four contributing Centres but the service is still limited by insufficient manpower.	現今公立醫院的過敏服務非常有限而且缺乏完整的系統。現有的過敏科服務主要由非專科提供，事實公立醫療系統也沒有專門的過敏診所。兒科免疫和傳染病科正努力發展一個由四個中心組成的服務與培訓網絡，但因為人手短缺的關係，提供的服務很有限。
Waiting times for even the simplest of allergy testing such as skin prick testing is unacceptably long (6 months).	一個簡單的過敏測試，如皮膚測試的輪候時間是六個月，是難以接受的。
Demand for Allergy services and Allergists are largely unmet.	過敏科服務和過敏科專家根本是供不應求。
Drug Allergy is a huge potential clinical workload that can impact on the practice of medicine by many specialties and this problem also needs to be addressed urgently.	不同專科都要面對處理藥物過敏的問題，醫療工作量愈來愈大，所以我們要盡快正視並統一處理這問題。
There are very few local guidelines for managing allergic diseases.	過敏病的本地專業指引乏善足陳。
The use of allergen immunotherapy - an essential tool in allergy treatment - is very limited. The laboratory support for Allergy/Immunology in the public sector is inadequate and cannot offer a complete portfolio of allergy tests. The Division of Clinical Immunology of the Department of Pathology at Queen Mary Hospital hosts the only laboratory in HK that is supervised by accredited Immunologists which provides support for Allergy and Immunology. The portfolio of tests is not comprehensive.	過敏免疫療法（脫敏治療）是一個治療過敏病的方式但並不常用。提供公共過敏科支援的化驗室非常不足並且不能提供一個全面的過敏測試。瑪麗醫院病理學系的臨床免疫學部是香港唯一由註冊免疫學家監管，提供過敏和免疫科支援的化驗室，但它提供的測試並不全面。

1.5 TRAINING There are inadequate numbers of trainees in Allergy and not enough trainers. GPs have either no or only minimal training in Allergy. The subspecialty of Paediatric Immunology and Infectious Diseases (PIID) that includes Allergy has recently been approved. This is well structured and operational with a network of four training Centres. However only a fraction of a clinician's time is spent on management of allergic diseases. Adult Internal Medicine has a training curriculum that encompasses Allergy and it is being updated. There have been no trainees in Allergy and Immunology in adult medicine since 1998. Training in adult Allergy is hampered by the lack of trainers and the virtually non-existence of an Allergy clinical service in the public sector. There is no HK-wide school policy on training of teachers / school nurses on use of adrenaline in allergic emergencies, or any decision made on desirability for schools to hold generic adrenaline auto-injectors.	1.5 培訓 過敏科的培訓人員和學員均不足。 普通科醫生一般只接受過有限，甚至沒有任何的過敏科培訓。兒科免疫和傳染病專科在過敏的服務培訓近來得到改善，它有一個良好的架構和四個培訓中心互相配合及運作着。由於要兼顧其他病種，醫生只能用很少時間去照顧過敏病人。 成人內科的培訓課程包含了過敏科並且正在更新中。不過自從 1998 年後，便沒有新晉過敏免疫科的受訓醫生。 過敏科的培訓因為缺乏老師，而且過敏科並不存在於公共醫療系統，因此受到限制。 在訓練學校老師或駐校護士於過敏緊急情況時使用腎上腺素或學校應否儲存腎上腺素注射器兩方面，香港的學校現在並沒有一個統一的制度去配合。
1.6 RECOMMENDATIONS We recommend that the best model for Allergy service delivery is a "hub and spokes" model. The "hub" would act as a central point of expertise with outreach clinical services, education and training provided to doctors, nurses and allied health professionals in primary and secondary care (the "spokes"). In this way, knowledge regarding the diagnosis and management of allergic conditions could be disseminated throughout the region. The hub and spokes in its entirety forms the "Allergy Centre". The hub should lead and coordinate the activities of the entire Centre.	1.6 建議 我們建議最好的覆蓋全港統一過敏科服務的模式為"軸輻式"(Hub & Spoke)。輪軸會作為專科培訓第三層過敏中心，並支援周邊第二層，或並延伸它的影響力去提升基層醫療服務及其培訓工作。這種形式方便廣泛傳播過敏的診斷和管理的知識，和提升臨床水平。第三層過敏中心應該負責領導和協調整個運作。

Each hub should have an Allergy service for both adults and children to increase critical mass and can share in knowledge transfer and resources. These hubs should be located eventually in such a way to optimize access for patients across the clinical clusters. In addition a network of satellite allergy services (spokes) could be established at other hospitals (for instance by allocating new resources, or more likely by changing the emphasis of one or two existing clinics a week designated for Respiratory Medicine, Otorhinolaryngology and/or Dermatology to become Allergy clinics). These Allergy clinics can then link to one of the Allergy hubs for academic, clinical and educational support. This solution might not require many more resources as the complex multi-system allergy cases could be siphoned off from the other clinics and collected up for management in a new dedicated Allergy service. We recommend that paediatric and adult services in an Allergy Centre should each be led by an Allergy specialist and each should be supported by at least one other clinical colleague (another Allergy specialist or an organ specialist with a special interest in Allergy), at least one trainee, specialist dietitian and specialist nursing support +/- a technician for routine allergy testing, counselling and education.	每個輪軸(Hub)應該擁有自己的成人及兒童過敏服務去增加使用者以及分享知識和資源。這些輪軸應該在不同的區域成立，去增加病人使用服務的機會。 而且輪輻(Spoke)可以在其他醫院成立，例如增加新的資源，或可能每週在已經存在的呼吸系統科、耳鼻喉科或/和皮膚科中，抽一至兩天作為過敏診所。這些過敏診所可以和過敏中心接軌，去獲取學術上、臨床上和教育上的支援。這些解決方案未必需要太多資源，因為一些複雜跨科的過敏病人可以由這些第二層過敏診所轉介去新成立的第三層過敏中心。 我們建議過敏中心的兒科和成人服務應該由一個過敏專家領導，並至少有另一位過敏專家或對過敏有興趣的其他專科醫生的一同參與，加上至少一位學員、專科營養師和專科護士去幫助病人作定期過敏測試、輔導和教育。
1.7 Adult Allergy Adult allergy is in a particularly parlous state with no specialists and no dedicated allergy service in the public sector. It requires an urgent remedy. We recommend that two pilot Allergy Centres are created and an Allergy specialist is recruited (from overseas if necessary) to each Centre to kick start the adult service and to oversee a training and research programme. We recommend that each new appointee is a joint	1.7 成人過敏科 成人過敏科因為沒有過敏專家和在公立醫療系統上沒有過敏科，是最難應付的部份，所以急需尋找解決方法。我們建議建立兩個試驗性的過敏中心並聘請（如有需要會從海外聘請）過敏專家去推動成人過敏科服務並管理培訓和研究的計劃。 我們建議每一位新聘的過敏專家要由醫院管理局和一間大學一起聘請。每一位僱員應該有三位學員、一位專科

appointment between the HA and an university. Each appointee should be supported by 3 trainees, specialist nurse and dietitian.	護士和一位營養師作支援。
We recommend that the two pilot Allergy Centres should be located at QMH/HKU and PWH/CUHK (hubs), so that Hong Kong, Kowloon and New Territories are covered. Two pilot Centres are required because of the heavy burden of allergic disease and the capacity of a solitary Centre in HK would very soon be overloaded. Both QMH and PWH have a long distinguished history for looking after children with allergic and immunological diseases, but both lack a dedicated Allergist in adult medicine.	我們建議兩個主要的過敏中心應在瑪麗醫院/香港大學和威爾斯親王醫院/中文大學成立，好讓香港島、九龍和新界都有過敏服務覆蓋。成立兩個過敏中心是因為只是一個過敏中心並不足以應付沉重的過敏症負擔。瑪麗醫院和威爾斯醫院都有悠久照料過敏兒童的歷史，但兩所醫院都欠缺一位專責的成人過敏科專家。
Creation of an Allergy Centre that integrates existing strengths in paediatric clinical/academic/education in allergy with a new adult clinical/academic/education allergy service would be a major catalyst to bridging the obvious gaps in service and academic provision.	成立過敏中心可以結合已有的兒童過敏科和新設的成人過敏科的臨床、學術、教育的服務。這樣可以縮短學術界和臨床服務之間的空隙。
Formal designation of both hospitals as pilot Allergy Centres could also provide formal encouragement to hospital and university management for some internal realignment of resources. Finally creating these innovative Allergy Centres could provide significant opportunities to attract private funding from benefactors to grow the discipline subsequently.	過敏中心在兩間醫院的正式成立也可以鼓勵其他醫院和大學去重新整頓他們內部的資源。最後，成立這個創新的過敏中心可以提供機會去吸納私人捐助去培育這個學系。
We recommend that metrics for success of each pilot Centre be pre- defined and progress in the first 5 years be assessed against those goals. If the pilot is successful, then the model should be continued and could even be extended to other suitable clinical-academic Centres.	我們建議為量度每個試驗性中心的成功標準而訂立目標，並在首五年評估這些目標。如果這個試驗性中心取得成功，這個模式應該繼續運行並延伸到其他適合的臨床-學術中心。
We recommend that the HKCP training curriculum for Immunology and Allergy is updated as soon as possible. In addition we suggest that the HKCP and HKCPath consider creating an intercollegiate training programme in Immunology and Allergy to produce Clinical Immunologists who will direct Allergy /	我們建議香港內科專科學院的免疫及過敏科培訓課程要盡快更新，而且我們建議香港內科專科學院和香港病理科專科學院考慮建立學院聯合的免疫和過敏科培訓課程，以培育更多臨床的免疫學家，讓他們可以管理過敏/免疫科的化驗室且為病人提供臨床服務。

Immunology laboratories and consult for allergic patients. We recommend the training of Allergy as a major to be included in the College training guidelines in Allergy & Immunology.	 我們建議主修過敏科應該包含在大學的過敏和免疫學的培訓指引內。
1.8 Paediatric Allergy When the HK Children Hospital (HKCH) is operational there will need to be some reorganisation with parts of the top tier paediatric Allergy services in the current network hospitals (QMH, QEH, PMH,PWH) being decanted to the HKCH (which will become the hub), leaving satellite services in previous hospitals (the spokes) in situ. To facilitate a smooth transition to the HKCH we recommend at least 4-5 FTE PIID specialists majoring in Allergy/Immunology to be appointed to run the top tier service in HKCH, to provide training and conduct local relevant audit/research (hub). A further 12 PIID specialists will be required to provide step-down and secondary services in both the training (PMH, PWH, QEH, QMH) and non- training (other HA paediatric units) posts for the specialty and general paediatrics (spokes). We recommend that four PIID trainees are recruited every 3 years, of which at least 2 Resident Specialists (RS) should be trained majoring in Allergy / immunology indefinitely. This will maintain a sustainable public workforce for specialty development and to cover for normal turn over. It should then be possible to produce 12 PIID specialists in 3 cycles (around 9 years) of whom 50% will have majored in allergy/immunology with the rest in Infectious Diseases. Therefore the estimated total required workforce for PIID in the public sector for the hub and spoke model could be 18-20 with 8 in the hub (4-5 in Allergy and Immunology and 2-3 in Infectious Diseases) and about 12 in the spokes working in both	1.8 兒童過敏科 當香港兒童醫院成立後，我們需要將擁有良好兒科過敏服務的醫院（瑪麗醫院、伊利沙伯醫院、瑪嘉烈醫院和威爾斯醫院）重組，然後投入到將會成為輪軸的香港兒童醫院，再將附屬的服務(輪輻)留在以前的醫院。 為了可以順利地轉移到香港兒童醫院，我們建議任命至少四至五個全職兒童免疫和傳染病科主修過敏或免疫學的專家去運作這個香港兒童醫院一等的服務，去提供培訓和作本地相關的研究（輪軸）。另外十二個兒童免疫和傳染病科的專家會負責提供在培訓方面（瑪麗醫院如、威爾斯醫院、伊利沙伯醫院和瑪嘉烈醫院）和非培訓方面（醫管局旗下的其他兒科部門）的輔助（輪輻）。 我們建議每三年聘請四位兒童免疫和傳染病科受訓者，而其中兩位需為註院專科醫生並須持續接受過敏或免疫科的訓練。這樣可以在專科發展上維持一個可持續的勞動力並補償人事的流失。 這樣三個周期（九年）後應該可以培訓出十二位兒童免疫和傳染病科專家，而其中50%主修過敏或免疫科，而剩餘的會主修傳染疾病科。所以一個公共兒童免疫和傳染病科的輪軸和輪輻模式總共需要十八至二十人，當中八位會在輪軸工作（四至五位在過敏和免疫科，兩至三位在傳染疾病科）而大約十二位輪輻會在專科和兒童普通科工作。 我們建議兒童免疫和傳染病科的全名應該包括“過敏”

the specialty and General Paediatrics. We recommend that Allergy is added to the title of the PIID training programme so it will become Paediatric Immunology Allergy and Infectious Diseases (PIAID) programme and the paediatric discipline should also be so named.	此字眼，變成兒科免疫過敏和傳染病科。
1.9 Drug Allergy Drug Allergy is a specialised branch of Allergy. It is common and constitutes a major clinical problem, which needs to be managed by Allergy specialists. We recommend resources to be made available to establish two separate supra-regional Drug Allergy Services at QMH and PWH (as they already have a limited service) to cover Hong Kong Island and Kowloon/New Territories. This could be part of the new pilot Centres.	1.9 藥物過敏 藥物過敏是過敏中的一個特別分支，它在其他的醫科部門經常出現，並需要過敏專家的管理。我們建議撥出資源在瑪麗醫院和威爾斯醫院成立兩個跨區的藥物過敏服務（因為它們已經正在提供有限服務），去覆蓋港島、九龍和新界，這可以是先導計劃的一部分。
1.10 Laboratory Support We recommend that two supra-regional labs for HK should be created with a focus on drug and food allergy that are directed by accredited Immunologists. They should be adequately funded so they have sufficient manpower, equipment and budget for reagents to widen the scope of routine laboratory service to include tests for specific IgE to a wider spectrum of whole allergen extracts and to allergen components; basophil activation tests; and lymphocyte function tests. This can be incorporated into existing laboratory support at QMH and PWH with only a relatively modest increase in resources. They could then support the new pilot Centres.	1.10 化驗室支援 我們建議兩個跨區的化驗室應該為專注藥物和食物過敏而成立，並由註冊的免疫科專家管理。它們應該有足夠的人力、器材和資金去擴闊他們的化驗服務，包括能夠化驗更多類型的致敏原和做新式的測試。這個方案可以用較少資源去配合瑪麗醫院和威爾斯醫院已有的化驗服務，然後便可以支援新成立的過敏中心。
1.11 Education We recommend that a collaboration is established between HK Institute of Allergy (as the professional platform) and Allergy HK (as the Allergy Charity) to create an agenda for professional CPD (such as regular workshops) as well as engaging and educating the public about Allergy. These organizations are	1.11 教育 我們建議香港過敏學會（專業醫護人員的平台）和香港過敏協會（過敏病人組織)可以攜手為醫護人員提供持續專業發展，並且主動為公眾提供過敏上的教育。我們亦鼓勵這些組織在制定他們的對策時，和其它專業組織和慈善團體合作。

strongly encouraged to involve other professional societies and charities as appropriate when designing their strategy.	
1.12 Schools We recommend that the appropriate Government department should audit the level of allergy training staff in schools receive, and consider taking urgent remedial action to improve this training where required. We recommend that the Government should review the desirability for schools holding one or two generic auto-injectors for adrenaline.	1.12 學校 我們建議相關的政府部門應該監察學校職員所得到的過敏培訓，並考慮在有需要時採取緊急的對應行動去改善培訓。 我們建議政府應該檢討學校應否存放一至兩枝腎上腺素注射器。
1.13 Air quality Acute health effects on respiratory morbidities from short term exposure to air pollution are well recognised, but the long term effects are, as yet, less well studied but may be of more serious consequence. Solving the urban air pollution problem is a huge challenge. Bold, realistic and moral leadership by national leaders is required to address this increasing important public health issue. We recommend that it is essential not only to develop effective strategies to reduce pollution but also to monitor whether the strategies result in a significant improvement in the prevalence of pollution related diseases in HK and the mainland.	1.13 空氣質素 只是短暫接觸空氣污染便可以影響呼吸系統的健康，這是廣為人知的事情，但長遠的影響可能更嚴重，也還需要更多的研究。解決城市的空氣污染問題是一個巨大的挑戰，我們需要一個果斷、實際和有承擔的國家領導者去正視這個愈發重要的公眾健康問題。 我們建議除了發展一個有效地減少污染的策略，還要監察這些對策是否能對污染引起的疾病有顯著的改善或預防效果。